



WHAT ARE YOU WORTH? THE VALUE OF A HUMAN LIFE AND ITS IMPACT
ON PERSONNEL RECOVERY

BY

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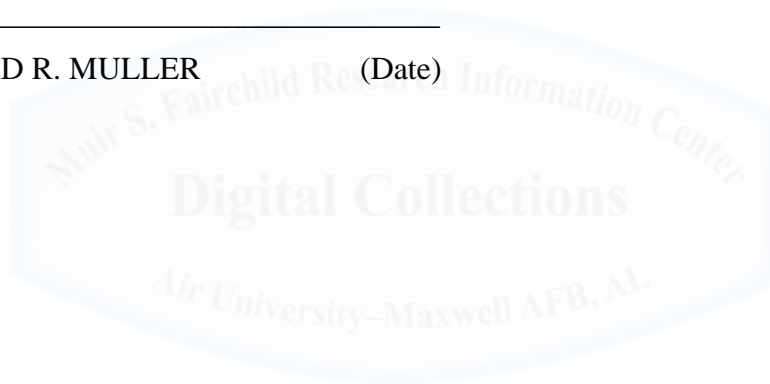
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DISCLAIMER

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.



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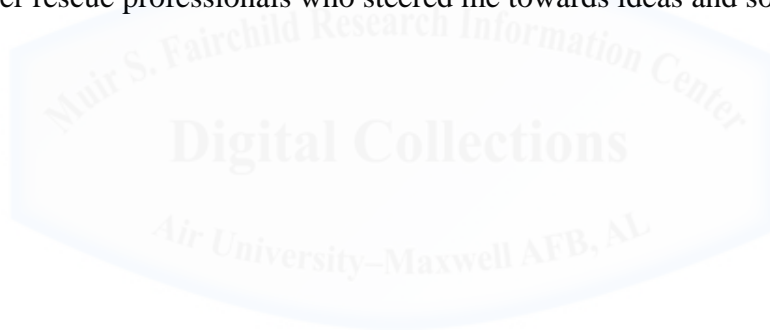


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ABSTRACT

This work explores core motivations and beliefs regarding the value of human life and then applies them to the future of personnel recovery, specifically for the United States. It briefly explores the historical roots and core documents of personnel recovery before crossing into an examination of value of life discussions in fields such as bioethics and actuarial science. The study then explores the impact of value of life on three key decisions: the decision to acquire PR capability, the decision to use it, and the decision to eliminate that capability. The study examines the impact of rescue on the will of the force and the will of the public and posits that the rescue decisions can vary across national, service, and temporal lines. Chapter Three contains case studies of the costly personnel recovery missions for Lt Col Iceal “Gene” Hambleton, Captain Roger Locher, and Captain William Andrews and examines their cost in terms of lives, material, and battlefield initiative, as well as examining the multi-faceted impact of the rescue. The next chapter shows the need for options other than the cultural and historical practice of costly rescue missions and provides possible alternatives for the future of personnel recovery. By altering preconceived notions about the future of PR, the DoD can influence what people expect—or, more interestingly, what they do not expect.



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Chapter 1

Introduction

Do to others as you would have them do to you.

Luke 6:31, NIV

Writer Arthur C. Clarke believes that “one should not try to describe the future, but to define the boundaries within which possible futures must lie.”¹ This thesis aims to explore the culture of the value of life in relation to the military, political, and public domains, as this is the context within which personnel recovery takes place.² Once the culture is examined, this thesis will seek to illuminate the problems and prospects shaping the future course of military personnel recovery.³ Therefore, the fundamental research question for this study is, in light of the cultural and historical evidence regarding value of life, what are the boundaries within which the future of personnel recovery must lie?

Methodology

To manage expectations, this paper does not contain a detailed history of personnel recovery (PR), a recipe for proper command and control of PR missions, or a recommendation for the next PR helicopter asset. Several excellent papers have already been written on those topics by experts in the field, and their work will serve that purpose well.⁴

¹ Arthur C. Clarke, *Profiles of the Future : an Inquiry into the Limits of the Possible*, (New York: New York, Harper & Row, 1973), 1.

² Culture in this thesis is best defined by "collective customs and achievements of a people" and can be influenced by everything from formal policy to organizational theory. From <http://www.etymonline.com/index.php?term=culture>, accessed May 15, 2013

³“The purpose here is first and foremost simply to understand those organizations and sub-cultures more completely...the results of such study might...help the military services better understand (and perhaps improve) their own organizations, or even help societies better understand the nature and role of the military organizations with whom they co-exist.” From Military Anthropology presentation, G.R. Lucas, Stockdale Center, US Naval Academy, 8.

⁴ See SAASS theses by Leahy, Blumentritt, Thompson, Wormley, Trumpfheller, and Sterr. Timothy J. Leahy, *The Future of USAF Combat Search and Rescue* (Maxwell AFB, AL: Air University, 1998).

John W. Blumentritt, *Playing Defense And Offense: Employing Rescue Resources As Offensive Weapons* (Maxwell AFB, AL: Air University, 1999).

Billy D. Thompson, *For Valor Or Value: An Examination Of Personnel Recovery Operations* (Maxwell AFB, AL: Air University, 2001).

Michael A. Wormley, *Combat Search And Rescue: Searching The History; Rescuing The Doctrine* (Maxwell AFB, AL: Air University, 2003).

This research will provide background and then examine three case studies in which the US had personnel in tactical isolation situations and study the strategic outcomes of each case. The case studies will be obtained from open source biographical and autobiographical accounts of the events, as well as personal interviews and official government after-action reports. The case study approach provides an opportunity to examine instances where culture leads to actions that do not match the results of a cost/benefit analysis within an isolated person scenario. An analysis of historical events within the three case studies builds on an understanding of the cultural context and the inherent implications for a society. Culture affects the expectations of both the military and the society they serve. Armed with an understanding of the culture, decision makers can set boundaries for future courses of action that fit into the cultural boundaries ascertained from historical observation.

Definitions

As the terms used to describe the rescue or retrieval of persons have changed over time, it is important to define several key terms for clarity. The current overall Department of Defense term for the idea of rescue is *personnel recovery*, which is defined in Joint Publication 1-02 as “the sum of military, diplomatic, and civil efforts to prepare for and execute the recovery and reintegration of isolated personnel.”⁵ *Recovery* refers to “actions taken to physically gain custody of isolated personnel and return them to friendly control.”⁶ The term *isolated person* means “US military, Department of Defense civilians, and contractor personnel (and others designated by the President or Secretary of Defense) who are separated from their unit (as an individual or a group) while participating in a US-sponsored military activity or mission and are, or may be, in a situation where they must survive, evade, resist, or escape.”⁷

John M. Trumpfheller, *Revisiting The Forward Look: Organizing Personnel Recovery For The 21st Century* (Maxwell AFB, AL: Air University, 2005).

Chadwick J. Sterr, *Rescuing Joint Personnel Recovery: Using Air Force Capability To Address Joint Shortfalls* (Maxwell AFB, AL: Air University, 2011).

⁵ JP 1-02. Washington, DC: Chairman of the Joint Chiefs of Staff, 2010, Amended through 15 Dec 2013, 204.

⁶ JP 1-02. Washington, DC: Chairman of the Joint Chiefs of Staff, 2010, Amended through 15 Dec 2013, 221.

⁷ JP 1-02. Washington, DC: Chairman of the Joint Chiefs of Staff, 2010, Amended through 15 Dec 2013, 137.

Within personnel recovery, there are some common terms regarding methods and situations. *Search and rescue* means “the use of aircraft, surface craft, submarines, and specialized rescue teams and equipment to search for and rescue distressed persons on land or at sea in a permissive environment.”⁸ A *distressed person* is an individual who requires search and rescue assistance to remove him or her from life-threatening or isolating circumstances in a permissive environment.⁹ However, this paper focuses mainly on *combat search and rescue*, which means the “tactics, techniques, and procedures performed by forces to effect the recovery of isolated personnel during combat.”¹⁰

Limitations

This thesis references only unclassified sources, which necessarily limits the discussion of current personnel recovery tactics, techniques, and procedures due to the potential for compromise to ongoing operations. Classification also limits the discussion of technological developments that could be ‘game-changing’ in personnel recovery. Persons with access to that classified information must apply the results of this research to any technological possibilities being explored.

Preview

This study intends to provoke discussions that explore core motivations and beliefs as they relate to the value of human life. Once those motivations and beliefs are exposed, this study will apply them to the future of personnel recovery, specifically for the United States. Although the results may be useful for other Western nations to consider, the output of this thesis is directed towards United States decision makers.

The second chapter provides the necessary background explaining the formation and manifestation of US beliefs about the value of human life within its military culture, specifically with regards to the retrieval of fellow military members from hostile territory or control. The first section takes a brief historical look at the United States military’s views on personnel recovery. The second section describes American society’s beliefs

⁸ JP 1-02. Washington, DC: Chairman of the Joint Chiefs of Staff, 2010, Amended through 15 Dec 2013, 233.

⁹ JP 1-02. Washington, DC: Chairman of the Joint Chiefs of Staff, 2010, Amended through 15 Dec 2013, 77.

¹⁰ JP 1-02. Washington, DC: Chairman of the Joint Chiefs of Staff, 2010, Amended through 15 Dec 2013, 44.

about personnel recovery ascertained from its core documents. The third section describes value of life considerations and how they may relate to personnel recovery perceptions, while the final section examines three decisions: the decision to acquire PR capability, the decision to use it, and the decision to eliminate that capability.

Chapter Three provides three case studies of costly military personnel recovery missions. The first case study is Bat 21B, the rescue of Lt Col Iceal “Gene” Hambleton from North Vietnam in April 1972. This case study illustrates an enormous expenditure of assets for the recovery of one man. The second case study is Oyster 01B, the rescue of Captain Roger Locher deep behind enemy lines in North Vietnam in June 1972. This study illustrates the lengths to which the United States was willing to go, even at the risk of mission sacrifice, for the recovery of one man. The final case study is the attempted rescue of Captain William Andrews, a pilot shot down over Iraq in February 1991. This study illustrates the willingness of the United States to risk the lives of many for the rescue of one, even when the probability of success is low. These three cases were chosen for their ability to illustrate the costs of recovery or non-recovery, and while there are obviously military and civilian personnel from all services that become isolated on land or at sea, these case studies are all aviators. Due to having areas of operation that are typically behind enemy lines, downed aviators generally present the most demanding recovery scenarios, therefore driving up the potential costs of recovery.¹¹

The fourth chapter contains analysis that shows the need for options other than the cultural and historical practice of costly rescue missions. The chapter then analyzes five options for the future of personnel recovery within the United States military and posits which are most likely in light of the cultural and historical evidence.

The concluding chapter summarizes key points, reviews potential implementation challenges, and provides warnings concerning the potential for cognitive bias.

¹¹ United States Air Force, *Air Force Personnel Recovery Core Function Concept 2013*, 3.

Chapter 2

Background and History

I will never leave an airman behind.

*United States Air Force Airman's
Creed*

I will never leave a fallen comrade.

United States Army Soldier's Creed

This chapter provides the necessary background explaining the formation and implementation of US beliefs about the value of human life within its military culture, specifically with regards to the retrieval of fellow military members from hostile territory or control. The first section takes a brief historical look at the United States military's views on personnel recovery. The second section describes American society's beliefs about personnel recovery ascertained from its core documents. The third section describes value of life considerations and how they may relate to personnel recovery perceptions, while the final section examines three decisions: the decision to acquire PR capability, the decision to use it, and the decision to eliminate that capability.

Historical Look

Before World War II, land war was compact and it was difficult to become isolated.¹ The battlespace was limited in size due to lack of long-distance communication equipment and weaponry, and fighting was limited to daylight hours due to lack of night-vision gear.² If a soldier did become isolated, it was easier to self-recover because he was typically not that far from the battlefield.³ Commanders did not care as much about isolated soldiers, not only due to the greater number of soldiers in that era but because

¹ Joint Air Power Competence Centre, *That Others May Live to Return With Honour: A Primer*, Combat Support Branch, January 2011, 3.

² Joint Air Power Competence Centre, *That Others May Live to Return With Honour: A Primer*, Combat Support Branch, January 2011, 3.

³ Joint Air Power Competence Centre, *That Others May Live to Return With Honour: A Primer*, Combat Support Branch, January 2011, 3.

many of the soldiers were mercenaries, or from the lower orders of society.⁴ Isolated mercenaries did not have to be paid, so the country was able to save money in salary.⁵ There was also no rush to get injured isolated personnel back to medical care, as medical care was rudimentary at best and most injured men died of their wounds anyway⁶

The roots of modern-day PR stem from World War II, when rescue efforts were made to recover aviators downed in the English Channel.⁷ Winston Churchill drove the British towards rescue, concluding that the aviators were “not just a critical resource but a strategic center of gravity.”⁸ Fixed-wing recovery efforts were soon joined by rotary-wing recovery assets late in World War II and on into the Korean War.⁹ By Vietnam, rescue had grown in importance, leading the 2nd Air Division to state “it is our policy that there is no higher priority air task than to assist in the search and recovery of downed pilots.”¹⁰ Dedicated rescue assets grew in number during the Vietnam conflict but shrank after its conclusion. By the time of Operations Desert Shield and Desert Storm in 1990-91, rescues were largely tasked to special operations forces due to lack of dedicated rescue forces.¹¹ This trend continued for Operation Allied Force in Kosovo in 1999 and through the 2001 opening of Operation Enduring Freedom as well.¹²

Core Documents, Core Beliefs

What is the normative view of the value of human life from a US perspective, according to source documents such as doctrine and policies? *Personnel recovery* (PR) is

⁴ Joint Air Power Competence Centre, *That Others May Live to Return With Honour: A Primer*, Combat Support Branch, January 2011, 3.

⁵ Joint Air Power Competence Centre, *That Others May Live to Return With Honour: A Primer*, Combat Support Branch, January 2011, 3.

⁶ Joint Air Power Competence Centre, *That Others May Live to Return With Honour: A Primer*, Combat Support Branch, January 2011, 3.

⁷ United States Air Force *Personnel Recovery Core Function Concept* 2013, 2.

⁸ Lee Pera, Paul Miller, and Darrell Whitcomb, “Personnel Recovery,” *Air and Space Power Journal* (Nov-Dec 2012): 89.

⁹ United States Air Force *Personnel Recovery Core Function Concept* 2013, 2.

As helicopters came into the operational inventory, they made rescue more feasible. Driven by the human elements of pride and honor, this feasibility enabled the cultural drive to leave no man behind.

¹⁰ USAF Operations From Thailand (1964-1965). CHECO Report., K717.0423-29, pg126, in USAF Collection, AFHRA. Reference portion is now declassified.

This could be a case of what Robert Jervis describes as experience creating dogma; because the United States ‘always’ went after them,(which is untrue—it was a recent phenomenon), the United States will now and always should go after them.

¹¹ United States Air Force *Personnel Recovery Core Function Concept* 2013, 2.

¹² John D. Cline, *Under New Management: Will America’s Dedicated CSAR Forces Finally Thrive in AFSOC?* (Monterey, CA: Naval Postgraduate School, December 2004), 14.

defined in Joint Publication 1-02 as “the sum of military, diplomatic, and civil efforts to prepare for and execute the recovery and reintegration of isolated personnel.”¹³ The PR mission directly supports three of the four enduring national interests from the 2010 National Security Strategy: secure citizens and allies, promote universal values such as preservation of life, and preserve an international order that promotes peace and security.¹⁴ Department of Defense (DOD) Directive 3002.01E, *Personnel Recovery in the DOD*, states that preserving the lives of military members, DOD civilians, and DOD contractors on US-sponsored missions is one of its highest priorities.¹⁵ The Central Command Personnel Recovery Concept of Operations states that “PR is an implicit requirement in all combat operations,” and the United States Air Force (USAF) Personnel Recovery Core Function Concept (CFC) elaborates, “PR is...a moral imperative...and vital to our nation’s interests.”¹⁶

The USAF PR CFC explains that PR has value at all levels of war.¹⁷ At the strategic level, PR preserves freedom of action and protects public support for the war. At the operational level, PR can offer a risk mitigation strategy. Finally at the tactical level, it can result in returning a trained fighter to friendly control to fight again another day. The PR CFC quotes General Mark A. Welsh III, the current Chief of Staff of the Air Force (CSAF), as saying that PR is a “foundational activity that defines who we are as an Air Force.”¹⁸

The USAF’s Operational Concept (OC) for PR states that it should provide rescue options for “anyone, anywhere, anytime”—not just other Airmen.¹⁹ DOD Directive 5100.01, *Functions of the Department of Defense and Its Major Components*, gives the Air Force wide-ranging responsibility: “Conduct global personnel recovery operations

¹³ JP 1-02. Washington, DC: Chairman of the Joint Chiefs of Staff, 2010, Amended through 15 Dec 2013, 204.

¹⁴ United States Air Force, *Air Force Personnel Recovery Core Function Concept 2013*, 9. *The National Security Strategy*. Washington, DC: The White House, May 2010, 17.

¹⁵ Change 1, 04/04/2013, para 4a, to DOD Directive 3002.01E, *Personnel Recovery in the Department of Defense*, 16 Apr 09. “It is DOD policy that preserving the lives and well-being of US military, DOD civilians, and DOD contractor personnel authorized to accompany the US Armed Forces who are in danger of becoming, or already are...captured [or] interned...while participating in US-sponsored activities or missions, is one of the highest priorities of the Department of Defense.”

¹⁶ United States Air Force, *Air Force Personnel Recovery Core Function Concept 2013*, 7, 9. CENTCOM PR CONOPS, 18 May 09, Appendix A, para MCT 6.2.

¹⁷ United States Air Force, *Air Force Personnel Recovery Core Function Concept 2013*, 1.

¹⁸ United States Air Force, *Air Force Personnel Recovery Core Function Concept 2013*, 1.

¹⁹ United States Air Force, *Operational Concept for Personnel Recovery*, 3 Sep 09, 20.

including theater-wide combat and civil search and rescue, in coordination with the other Military Services, USJFCOM, USSOCOM, and DoD Components.”²⁰ National Security Presidential Directive (NSPD) 12 broadened the term *isolated personnel*, which now includes “US military, Department of Defense civilians, and contractor personnel (and others designated by the President or Secretary of Defense) who are separated from their unit (as an individual or a group) while participating in a US-sponsored military activity or mission and are, or may be, in a situation where they must survive, evade, resist, or escape.”²¹ PR involves reporting, locating, supporting, recovering, and reintegrating isolated personnel to ensure adversaries are discouraged from attempting to capture or exploit them. In addition to maintaining PR capabilities, policies are used to dissuade potential prisoner-takers, such as the US government’s stance that it does not negotiate with or pay ransom to anyone who takes hostages.²²

The US Airman’s and Soldier’s Creeds promise that fallen airmen and soldiers will never be left behind.²³ This culture meets political reality in DODI 1300.23, which states, “The DOD has a moral obligation to protect its personnel, prevent exploitation of its personnel by adversaries, and reduce the potential for captured personnel being used as leverage against the United States.”²⁴ Failing to recover personnel can lead to public and political pressure to withdraw from the area of operations, as seen with the

²⁰ DOD Directive 5100.01, *Functions of the Department of Defense and Its Major Components*, 21 Dec 2010, 34.

²¹ JP 1-02. Washington, DC: Chairman of the Joint Chiefs of Staff, 2010, Amended through 15 Dec 2013, 137.

United States Air Force *Personnel Recovery Core Function Concept* 2013, 4.

²² National Security Presidential Directive 12, 18 Feb 02. This statement is unclassified.

²³ <http://www.airforce.com/learn-about/airmans-creed/> Accessed 10 Feb 14.

<http://www.army.mil/values/soldiers.html> Accessed 10 Feb 14.

²⁴ Department of Defense, DODI 1300.23, *Isolated Personnel Training for DOD Civilian and Contractors*, August 20, 2003, para 4.1.

Where does the “moral duty” to seek and rescue fellow human beings stem from, and which human beings are other humans morally obliged to seek and rescue? William Andrews, a former POW and the subject of a case study in Chapter Three, takes a realist viewpoint: “I don’t think there’s a moral obligation to try and pick up somebody. I think we have an interest to try, but that’s not founded on a moral principle. The state’s and military’s interests are better served by preventing dead warriors and prisoners, showing the virtuosity of US skills, capabilities, and great technology, but I think when you put a moral obligation behind rescue, you set yourself up to lose a potentially large number of rescuers. As you probably know from my personal history, five soldiers died trying to fly their UH-60 into the middle of a Republican Guard infantry division in an ill-advised attempt to rescue me. The esprit behind that incredibly brave mission was admirable, but if it had been founded in considered interest the mission might have been scrubbed, which I believe would have been the better course.” William Andrews, personal email to author, 2014.

Blackhawk Down incident in 1993 where public outcry over the failure to recover US personnel led to President Clinton's decision to withdraw from Somalia.²⁵ In short, PR may not win the war, but it can, in certain circumstances, lose the war.

On Life Itself

What exactly is life and why is it noteworthy? According to Michael Mautner, "life is a process whose outcome is the...safeguard and...self-reproduction of complex molecular patterns."²⁶ This complexity makes life unique, as even the simplest cell processes are run by DNA and proteins that are complex molecules designed for their specific purpose.²⁷ The environment that supports life is also amazingly complex. The universe contains just the right amount of energy to avoid rapid expansion or collapse, just the right amount of gravity to hold together but not crush life, and just the right electromagnetic force to bond molecules together.²⁸ From the smallest molecule to the vastness of the universe, the complexity of life's processes makes it noteworthy.

One view on the value of life stems from the method of reproduction. As opposed to plants, which scatter many seeds and let nature take its course, or fish and reptiles, who typically have many young and take less care of them afterwards, most mammals only reproduce a small number of live young that must be nurtured and protected.²⁹ Because the number of offspring is small, each life is valuable and worth protecting.³⁰ If one reptile offspring is lost, the effect is minimal, but if one mammalian offspring is lost, it can have a much greater effect on the population.

The traditional view in bioethics is that life has intrinsic value.³¹ According to

²⁵ Mark Bowden, *Black Hawk Down* (New York, NY: Penguin Books, 1999), 331.

Lee Pera, Paul Miller, and Darrell Whitcomb, "Personnel Recovery," *Air and Space Power Journal* (Nov-Dec 2012): 98-99.

²⁶ Michael Mautner, "Life-Centered Ethics, and the Human Future in Space," (*Bioethics*, Vol 23, no 8, 2009, 433-440), 435-436.

²⁷ Michael Mautner, "Life-Centered Ethics, and the Human Future in Space," (*Bioethics*, Vol 23, no 8, 2009, 433-440), 435.

²⁸ Michael Mautner, "Life-Centered Ethics, and the Human Future in Space," (*Bioethics*, Vol 23, no 8, 2009, 433-440), 435.

²⁹ Michio Kaku, *The Future of the Mind* (New York, NY: Random House, 2014).

³⁰ Michio Kaku, *The Future of the Mind* (New York, NY: Random House, 2014).

³¹ Daniel Sulmasy, "Speaking of the Value of Life," *Kennedy Institute of Ethics Journal* 21, no..2 (June 2011), 181-199. 'Traditional' must be taken in time context, as the social nature of people can change over time. For instance, consider the attitudes toward slaves and their value 200 years ago.

bioethicist Daniel Sulmasy, life is both finite and priceless.³² Alternative bioethical views, such as utilitarianism and liberalism, do not deny that life can have value but instead offer different sources of that value. Whereas in the traditional view life's value is intrinsic, life's value in the utilitarian view is determined by "some future state of affairs."³³ The utilitarian value of a human life is measured by its "contribution to the social whole."³⁴ On the contrary, the liberal view states that the value of life is something each individual assigns to his or her own life.³⁵ A final view is that life's value is given by an outside source as no one chooses to come into existence and no one is the cause of their own existence.³⁶ This is backed by the idea of a Creator who endows value simply by creating a person, as put forth in the United States Declaration of Independence.³⁷

What exactly is the value of a life? Even if it involves unbiased calculations, Daniel Sulmasy states that putting a value on a human life, or "turning people into commodities and assigning them prices, is a practice that was abandoned with the abolition of slavery."³⁸ Not desiring to take that ethical regression, he concludes that while the value of life is not infinite, it is not able to be measured.

However, the practice of measuring the value of a life has ancient roots. The Anglo-Saxon concept of *weregild*, or the amount of money fixed as compensation for the murder or disablement of a person computed on the basis of rank, originated in the Middle Ages.³⁹ A similar concept is also included in Pashtunwali, the ancient Afghan tribal rules. The *saz*, or blood money, is compensation paid to a victim's family after a murder in order to bring peace back to the tribes.⁴⁰ The Islamic concept of *diyya*, dating back to Islam's roots in 600 AD, is paid as compensation for wrongful death and its

³² Daniel Sulmasy, "Speaking of the Value of Life," *Kennedy Institute of Ethics Journal* 21, no..2 (June 2011), 181-199.

³³ Daniel Sulmasy, "Speaking of the Value of Life," *Kennedy Institute of Ethics Journal* 21, no..2 (June 2011), 181-199.

³⁴ Daniel Sulmasy, "Speaking of the Value of Life," *Kennedy Institute of Ethics Journal* 21, no..2 (June 2011), 181-199.

³⁵ Daniel Sulmasy, "Speaking of the Value of Life," *Kennedy Institute of Ethics Journal* 21, no..2 (June 2011), 181-199.

³⁶ Daniel Sulmasy, "Speaking of the Value of Life," *Kennedy Institute of Ethics Journal* 21, no..2 (June 2011), 181-199.

³⁷ US Declaration of Independence, retrieved from http://www.archives.gov/exhibits/charters/declaration_transcript.html Accessed 28 Apr 14.

³⁸ Daniel Sulmasy, "Speaking of the Value of Life," *Kennedy Institute of Ethics Journal* 21, no..2 (June 2011), 181-199.

³⁹ <http://dictionary.reference.com/browse/Weregild> Accessed 15 May 14.

⁴⁰ <http://afghanland.com/culture/pashtunwali.html> Accessed 15 May 14

amount is decided based on the gender and religious affiliation of the victim.⁴¹

Nikolas Rose points out that life valuation still routinely takes place today, not only in the courts deciding compensation for wrongful death lawsuits, but also in the form of government compensation to victims of disaster.⁴² The US government paid \$150,000 per victim for the 1999 bombing of the Chinese Embassy in Belgrade, \$2 million per victim for the 1998 Marine aerial cable incident in Italy, and \$2 million per victim of the September 11th attacks.⁴³ In contrast, the Afghan government offered victims of the 2003 ‘wedding party’ incident \$200 per victim.⁴⁴ Rose concludes that life is given a value in these contexts, and the value depends on the citizenship of the victims and the financial and political resources of those who protest the loss.⁴⁵

This debate boils down to the simple question: “How much is a life worth?” Again, there is professional precedent to this practice, as life insurance adjusters must estimate the value of their policies. Insurance adjusters and other providers such as the Social Security Administration and Veteran’s Administration must take into account the earning potential and services provided by that individual and arrive at an estimated ‘replacement cost’ to establish the death benefit. The website *lifehappens.org* even has a “Human Life Value Calculator” on its website that, after calculating a typical lifetime income based on specific circumstances, produces “a final number that gives an approximate measure of your net contribution to your family—your human life value.”⁴⁶

There are also interesting parallels to the field of biomedical ethics. One biomedical ethics debate is the distinction between killing and allowing someone to die.⁴⁷ Is deciding not to execute a PR mission for an isolated person the equivalent of failing to attempt resuscitation of a heart attack victim? In neither case is one killing the

⁴¹ <http://www.state.gov/j/drl/rls/irf/2006/71421.htm> Accessed 15 May 14.

⁴² Nikolas Rose, “The Value of Life: Somatic Ethics and the Spirit of Biocapital,” (*Daedalus*, Winter 2008, 36-48), 38-39.

⁴³ Nikolas Rose, “The Value of Life: Somatic Ethics and the Spirit of Biocapital,” (*Daedalus*, Winter 2008, 36-48), 38.

⁴⁴ Nikolas Rose, “The Value of Life: Somatic Ethics and the Spirit of Biocapital,” (*Daedalus*, Winter 2008, 36-48), 38.

⁴⁵ Nikolas Rose, “The Value of Life: Somatic Ethics and the Spirit of Biocapital,” (*Daedalus*, Winter 2008, 36-48), 38.

⁴⁶ <http://www.lifehappens.org/insurance-calculators/calculate-human-life-value/> Accessed 11 May 14.

⁴⁷ Daniel Sulmasy, “Speaking of the Value of Life,” *Kennedy Institute of Ethics Journal* 21, no..2 (June 2011), 181-199.

individual—they are a victim of their circumstance. But would it be unethical to allow the isolated person to die? Although the outcome of neither attempt is certain—a valiant PR mission or resuscitation attempt can still fall short—can one be liable for having a capability to help and choosing not to use it? Similarly, once an attempt has been initiated, when is it ethical for it to be withdrawn? As prolonging life becomes the primary concern of earthly existence, this question will become harder and harder to answer.

There is an interesting nuance between the value of life and the value of life *extension*. This dichotomy distinguishes between life's intrinsic value, which has nothing to do with its length, and a valuation of additional time spent alive on Earth after a certain point or event.⁴⁸ This issue is often debated in the context of extraordinary measures taken to extend the life of terminally ill patients. In 2006, England's National Institute for Clinical Excellence (NICE) actually ruled against two treatments for late-stage colon cancer, stating, "their use was not compatible with the best use of National Health Service resources."⁴⁹ The NICE set a cap of £30,000 per additional quality life year gained by the treatments, and the two treatments exceeded that cap.⁵⁰ This has interesting parallels to rescue—could there be a cap per additional quality life year gained by the rescue?

Even in a culture obsessed with measurement, the idea of then putting a dollar value on rescue based on years of productive life lost can seem crass. Is it this perception that prevents the United States from opting for, as Robert Haston states, a "risk-based strategy, weighing the possibility, length, and conditions of capture against the risk of rescue?"⁵¹ Haston continues, "The number of productive man-years avoided in prison camp should be less or equal to the number of productive man-years spent in the grave to accomplish the task. Looking at it this way, it would have been hard to justify many

⁴⁸ Daniel Sulmasy, "Speaking of the Value of Life," *Kennedy Institute of Ethics Journal* 21, no..2 (June 2011), 181-199.

⁴⁹ Nikolas Rose, "The Value of Life: Somatic Ethics and the Spirit of Biocapital," (*Daedalus*, Winter 2008, 36-48), 36.

⁵⁰ Nikolas Rose, "The Value of Life: Somatic Ethics and the Spirit of Biocapital," (*Daedalus*, Winter 2008, 36-48), 36.

⁵¹ Robert Haston, *How An Actuarial Scientist Might Look At Life, Death, and Dollars in Military Personnel Recovery*, unpublished manuscript. Personal email to author, 2013.

high-risk rescue attempts during the zenith of rescue during Vietnam.”⁵² For example, in the rescue of Bat 21B, eleven men perished to prevent Lt Col Hambleton from spending less than one year as a prisoner of war.⁵³

Personnel recovery can be examined from an economic viewpoint to gain vital information on what humans believe about the value of a human life. In this context, the question is “what is the cost of rescue versus the cost of replacement?” This question is common practice in personal and professional settings. Auto insurance companies make this evaluation when deciding to repair or declare ‘totaled’ a wrecked vehicle, and health insurers make the evaluation when deciding whether to fund certain procedures or medicine for people in various states of health. Robert S. McNamara, who went from president of the Ford Motor Company to head of the Department of Defense during the Vietnam War, first introduced the business accounting system of private enterprise and the concept of “cost comparison” to the United States military. “The Department of Defense must achieve the following objective: exchange our country's security for the least amount of risk, least amount of expenditure, and, in the event of entering a war, the least number of casualties.”⁵⁴ The United States government has spent millions of dollars to kill one terrorist—how does that compare to spending millions of dollars to save one American? Theoretically, the millions spent killing one terrorist saves many people who would have been killed in the next terrorist attack, whereas the millions spent on a rescue typically saves just one.

Lastly, the relative value of isolated persons must be addressed. If assets are scarce, there must be priority for their use. If all people have equal value, as the Declaration of Independence states, is it right to say the general is higher on the list than the airman, the intelligence captain higher than the supply captain, and the pilot higher than the dining facility worker? What about prioritizing high-priority non-combatants over lower priority combatants? Making a prioritized list does not necessarily mean that one American is more valuable than another American, only that they may be harder to

⁵² Robert Haston, *How An Actuarial Scientist Might Look At Life, Death, and Dollars in Military Personnel Recovery*, unpublished manuscript. Personal email to author, 2013.

⁵³ Busboom, 28.

⁵⁴ Robert S. McNamara with Brian VanDeMark, *In Retrospect: The Tragedy and Lessons of Vietnam*, (New York: Times Books, 1995), 27-29.

replace due to the volume of resources it takes to train one specialty over another.⁵⁵

Since it is somewhat difficult to talk openly about these value-of-life factors, the PR community generally remains focused on technical questions such as which helicopter to acquire for PR rather than diving into the ethical debate about what they do.⁵⁶

Three Decisions

Sun Tzu's famous dictum states that a fighting force should "know the enemy and know yourself; in a hundred battles you will never be in peril."⁵⁷ The question is, then, in regards to cultural value of a human life and the decisions that flow from it, how well does the United States know itself? The United States at times goes to great effort and expense to recover an isolated person. The enduring lesson from studying personnel recovery events then is not what is learned about combat tactics, techniques, and procedures, but what is learned about ourselves. Human life has value, says US doctrine and operational documents. But does it have the 'right' value, and can such a question even be asked?

The rescue dilemma becomes a three-pronged risk management decision. The first decision is how much a nation should spend to attain the capability to retrieve its people from varying levels of dangerous situations. The second decision is how much of this capability to risk in a recovery effort. The final decision is how much risk is assumed if that recovery capability is eliminated. Culture impacts all of these decisions, and the cultural impact of rescue might be different depending on the country, the services, and the types of isolated persons within the services, as well as different periods of time for the same organization.

The Decision to Acquire PR Capability

How does rescue contribute to achieving the strategic goal of winning the nation's wars? It contributes to the strategic goals by denying the enemy a victory.⁵⁸ It does this not by killing enemy forces or breaking his equipment, but by supporting the two components of the national will: will of the force and will of the public. Emile Simpson

⁵⁵ Darrel Whitcomb, "Combat Search and Rescue: A Longer Look," (*Aerospace Power Journal*, Summer 2000), 32.

⁵⁶ This is true despite the fact that the PR community depends on the value of life for their budgetary survival.

⁵⁷ Sun Tzu, *The Art of War* (New York, NY: Oxford University Press, 1963), 84.

⁵⁸ <http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104515/pararescue.aspx>
Accessed 10 Apr 14.

proposed that what is desired (policy) is tied to what is possible (operational approach) via a two-way bridge called strategy.⁵⁹ The policy, outlined in the core documents section above, is that preserving the lives of military members, DOD civilians, and DOD contractors on US-sponsored missions is one of its highest priorities.⁶⁰ The operational approach is to execute combat search and rescue, non-conventional assisted recovery, or some other type of tactical recovery. The strategy that connects the two is the PR ‘mindset’ that the United States will leave no man behind. Is the ‘leave no man behind’ mantra an effective strategic narrative? If so, for what audiences is it effective? These next two sections will examine the impact of the ‘leave no man behind’ mindset on the will of the force and the will of the public and relate how they are important in deciding to acquire rescue capability.

Will of the Force

The will of the force involves the psychological effect of expected rescue for both isolated and non-isolated personnel. There are two components of this psychological effect on the force: the US military view of itself and the world’s view of the US military, to include the credibility of US military action. First, rescue affects morale by turning a defeat, the isolation of the person, back into victory by recovering the person. This “defeat into victory” aspect is fundamental to the US military’s view of itself because it needs to believe it will conquer its enemies to continue as a fighting force with high morale. The USAF PR Core Function Concept states that if the United States abandons its commitment to PR, “we break faith with those who go in harm’s way to prosecute national objectives.”⁶¹ The US military wants to believe it is morally superior, and ‘betraying’ fellow service members by breaking faith and leaving them behind causes military members to question their moral superiority.

As US military service members hear and understand the PR policies, they form

⁵⁹ Emile Simpson, *War from the Ground up: Twenty-First Century Combat as Politics* (New York, NY: Oxford University Press, 2013), 91.

⁶⁰ Change 1, 04/04/2013, para 4a, to DOD Directive 3002.01E, *Personnel Recovery in the Department of Defense*, 16 Apr 09. “It is DOD policy that preserving the lives and well-being of US military, DOD civilians, and DOD contractor personnel authorized to accompany the US Armed Forces who are in danger of becoming, or already are...captured [or] interned...while participating in US-sponsored activities or missions, is one of the highest priorities of the Department of Defense.”

⁶¹ United States Air Force *Personnel Recovery Core Function Concept* 2013, 9.

expectations that their country will try to find them if they become isolated.⁶²

Advertisement of rescue intentions conveys a powerful signal to troops that they are important, which increases morale. It also shows troops that their government means what it says in the National Security Strategy which touts that people are the United States' most important 'resource.'⁶³ Paradoxically, the potential downside of advertising rescue intentions is that it creates expectations. If those expectations are not fulfilled, it could be worse than if there were no expectations at all. For example, the morale of F-15E units in Operation Desert Storm significantly decreased after the non-rescue of Corvette 03, an F-15E shot down over western Iraq on 17 January 1991.⁶⁴ Members of the F-15E community felt that the rescue forces should have done more to locate their downed comrades, even though the location of the downed airmen was not known.⁶⁵ Essentially, they were expecting 'the war to stop' to retrieve their isolated members, as happened in Vietnam, and were embittered when that did not happen.⁶⁶

Despite these isolated cases of disappointment, the strategic narrative of 'leave no man behind' is effective in bolstering the morale of service members, especially those that find themselves isolated. William Andrews, the subject of the Mutt 41 case study in Chapter 3, stated, "I considered myself a fairly religious person anyway but I had faith in God and the belief that eventually somebody was going to come get us out...belief that the President and the American people weren't going to leave us there."⁶⁷ Similarly, Rhonda Cornum, the flight doctor on the helicopter shot down trying to rescue Andrews, echoed, "I had gut confidence -- spiritual strength for me was important -- knowing that the Army was going to come get me," she said. "My new mission was to keep myself and

⁶² There appears to be a US cultural assumption that isolated people will be sought after. Is that founded? Is there a right to be sought after? Who does it extend to, and who is obligated to provide it? The United Nations Universal Declaration of Human Rights contains many "rights" but no delegated "responsibilities." See <http://www.un.org/en/documents/udhr/> Accessed 10 May 14.

⁶³ *The National Security Strategy*. Washington, DC: The White House, May 2010, 16.

⁶⁴ <http://www.pownetwork.org/gulf/gd012.htm> Accessed 3 May 14.

⁶⁵ <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj04/spr04/whitcomb.html> Accessed 3 May 14.

⁶⁶ <http://www.airpower.maxwell.af.mil/airchronicles/apj/apj04/spr04/whitcomb.html> Accessed 3 May 14.

Unlike other types of missions, PR has clear objectives that are understood by all and easily measurable—get the isolated person back in friendly control.⁶⁶ It appeals to people on a human level, which can be dangerous because it tempts decision makers to 'stop the war' for a PR event. See Darrel Whitcomb, "Combat Search and Rescue: A Longer Look," (*Aerospace Power Journal*, Summer 2000), 29.

⁶⁷ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 11.

the guys I was shot down with alive until they did."⁶⁸

The second component of rescue's psychological effect on will of the force is that it affects the world's view of the US military, to include its credibility. By causing US military members to become isolated or taking isolated persons captive, adversaries seek to cause doubt in the mind of the force about the likelihood of victory. As mentioned above, the US military needs to believe in its prospects for victory in order to maintain morale, and rescue can counteract the adversary strategy of demoralizing US troops. Secondly, rescue can set an example for the world that the United States values its troops and will try to find them if they become isolated, using maximum force if required. This could deter adversaries from attempting to destroy the will of the force by isolating personnel.

Finally, the credibility of US forces is increased when the United States says that it will retrieve an isolated person and then does it. It also sets an example that people are valuable assets. Unfortunately, though, this credibility can be damaged when the United States is not able to follow through on its pledge to retrieve isolated persons. Michael Scott Speicher, a Navy combat pilot who was the first to be shot down over Iraq during Operation Desert Storm in 1991, was not recovered until 2 August 2009.⁶⁹ Until conclusive evidence was found, there were multiple groups claiming that the United States abandoned Speicher in Iraq. One group was led by Amy Yarsinske, who wrote a book in 2002 alleging Speicher was alive and still being held in Iraq eleven years after his aircraft was shot down.⁷⁰ She accused three presidential administrations of failing to look for him and stirred up a conspiracy theory of lies and coverups by government officials. These accusations hurt US credibility until US Marines found Speicher's remains in 2009 and forensic analysis confirmed Speicher did not survive the crash.

Currently, the United States has one isolated person, Private Bowe Bergdahl, who was captured by Taliban forces in 2009, is believed to be alive, and has not yet been

⁶⁸ Rhonda Cornum, *She Went to War* (Novato, CA: Presidio Press, 1992).

Article Six of the United States Armed Forces Code of Conduct concludes with the assertion, "I will trust in my God and in the United States of America." What does trust in the United States look like—is it trust that the United States will come for you, or trust that the United States will make the right decision for the nation?

⁶⁹ <http://www.defense.gov/releases/release.aspx?releaseid=12862> Accessed 3 May 14.

⁷⁰ Amy Waters Yarsinske, *No One Left Behind* (New York, NY: Penguin Group, 2002).

recovered.⁷¹ Though his case has largely dropped from the media's attention, observers typically ask, "How can this be?" With today's technology, perhaps there is an assumption that the United States can find anyone anywhere on the earth, even Osama Bin Laden. How long should the United States keep looking for its isolated service members? There are organizations still searching for servicemen missing in action from World War II, Korea, and the Vietnam War, so the answer is most likely 'until they are found.'

If the answer is not 'search until they are found,' will Americans continue to volunteer for armed services or other risky duty knowing the US may have neither the ability nor desire to come for them if they are detained? For those that do volunteer, will the lack of rescue policy de-incentive risk-taking by military members in combat? If service members feel they must look out for themselves, there could be a reduction in risk-assumptive behavior in obedience to orders. Therefore, the will of the force is an important element in deciding whether or not to acquire rescue capability.

Will of the Public

The USAF PR Core Function Concept notes that adversaries take prisoners in order to "force changes in US policy, win favorable concessions, use American cultural norms to ...influence the public and change our political will, and discredit the US narrative by showing weakness and disrupting the US theme of strength and eventual victory."⁷² To have an American taken prisoner, whether it is a soldier or a civilian reporter, means that the US government has effectively lost control of that person, and that for all its might and technology, the US is at the mercy of its adversary in that case.⁷³ That can have a detrimental effect on public opinion about the United States, both at home and abroad⁷⁴.

Thanks to modern media and the common perception that precision standoff munitions guarantee a low casualty rate, there is an increased sensitivity to casualties among the American population. For that reason, propaganda designed to impact

⁷¹ <http://www.cnn.com/2014/02/23/world/asia/taliban-talk-suspension/> Accessed 3 May 14.

⁷² United States Air Force, *Air Force Personnel Recovery Core Function Concept 2013*, 9.

⁷³ Should the US let reporters go to Iraq? If they are a source of potential prisoners, should the US tell them not to go, and if they go, tell them they are on their own? Even with such a policy in place, the public may still be negatively influenced by seeing a civilian reporter held hostage in a war zone.

⁷⁴ This scenario was played out during the Iranian hostage crisis, where the strongest nation on earth was seemingly powerless to rescue its embassy workers taken hostage in 1979.

national will can have strategic impact. As Thomas Schelling stated, “Hostages represent the power to hurt in its purest form,”⁷⁵ and Americans dislike being subject to that power. Therefore, it is important to acquire recovery capability to deny propaganda opportunities to the adversary, not only for the next of kin’s sake, but to maintain the integrity of general public support for United States action.⁷⁶

Rescue stories are gripping and appeal to a basic human desire to help those in distress.⁷⁷ They play well in the media, both inside and outside the military.⁷⁸ The rescue motto, “These things we do, that others may live,” also plays well, portraying rescue assets as supremely self-sacrificing and selfless.⁷⁹ The positive coverage and subsequent career boost from winning awards and becoming well-known leads to promotion to colonel or general for the majority of rescue pilots who execute high-visibility missions.⁸⁰ So not only does rescue avoid negative media coverage of isolated persons, it generates positive media coverage for heroic rescue stories.

Rescue: It Varies

The decision to acquire rescue capabilities varies greatly across the world. Culture heavily impacts this decision, and the cultural impact of rescue is different for different countries, different services, and different types of isolated persons within the services, as well as different periods of time for the same organization. The next several sections detail the impact of a group’s culture on their decision to acquire rescue capability and shows that it can vary within the same alliance, within the same military,

⁷⁵ Thomas Schelling, *Arms and Influence*, (New Haven: Yale University Press, 2008), 6.

⁷⁶ Would the United States ever get to a point where the US government would kill or incapacitate an isolated person or direct them to kill themselves, if rescue was impossible, to prevent that person from falling into enemy hands and giving up vital national secrets or being used in ruinous propaganda? Most Americans would say no, but U-2 pilots overflying the Soviet Union in the 1950-60s were given cyanide pills and neurotoxin needles to use in the event of impending capture. For more information, see Church Committee Reports, *Unauthorized Storage of Toxic Agent* (The Assassination Archives and Research Center (AARC). 1975-1976) 7.

⁷⁷ Darrel Whitcomb, "Combat Search and Rescue: A Longer Look," (*Aerospace Power Journal*, Summer 2000), 32.

⁷⁸ It is important to understand, however, that personnel recovery is still warfighting—it is another form of battle. See Darrel Whitcomb, "Combat Search and Rescue: A Longer Look," (*Aerospace Power Journal*, Summer 2000), 29.

⁷⁹ Kenneth Todorov and Glenn Hecht, “Air Force Personnel Recovery as a Service Core Function,” (*Air and Space Power Journal*, Fall 2011), 7.

⁸⁰ For example, Thomas Trask, Slate 46 Mission Flight lead; James Cardoso, Vega 31 Mission Flight lead; Dale Stovall, Oyster 01B Mission Flight Lead; and Paul Fortunato, Basher 52 Rescue helicopter, were all promoted to colonel or general.

and even within the same service over the passage of time.

Across Countries

President Obama states in the 2010 National Security Strategy that “America’s greatest asset is its people.”⁸¹ The value of a human life in a liberal democracy is high by definition because, as Boaz Ganor states:

Human beings have joined together in human society in order to ensure—first and foremost—their physical existence and individual safety. Therefore, the primary requirement of any nation and any form of government is to protect the lives of its citizens. Damage to their existential safety is liable to be translated in a liberal democracy into political change, government change, and in more severe cases, even a change in the type of regime. Therefore the ‘price’ that terrorists can demand in exchange for not harming human lives in a democratic nation is unquestionably higher than the ‘price’ they can demand and obtain in nations with other forms of governance.⁸²

Therefore the decision to acquire PR capability may be predictable by examining the type of government in that nation.⁸³

As part of a liberal democratic nation, the United States Air Force is the only service in the only nation in the world to have dedicated PR forces as part of a national system.⁸⁴ Why is that the case, and should it continue? Are the rest of the nations simply putting the ‘right’ amount of emphasis on personnel recovery, or do they wish they could have what the United States has but cannot due to budget restrictions? The United Kingdom’s personnel recovery regulation, JWP 3-66, states, “The UK Government has a duty to reduce, wherever possible, the risk to the lives and welfare of its citizens, including servicemen and women. The provision of a capability to recover personnel who may be placed at risk is a moral obligation recognizable to all.”⁸⁵ While it does not

⁸¹ *The National Security Strategy*. Washington, DC: The White House, May 2010, 5.

⁸² Boaz Ganor, *The Counter-Terrorism Puzzle: A Guide for Decision Makers*, (New Brunswick: Transaction Publishers, 2008), 154.

⁸³ One fundamental responsibility of a democracy is to answer the question, “How can people organize themselves so as to preserve their liberties and advance their interests?” Rescue is part of the effort to preserve liberty and advance interests. See Peter Feaver, *Armed Servants: Agency, Oversight, and Civil-military Relations* (Cambridge, Mass.; London: Harvard University Press, 2005), 4.

⁸⁴ Joint Air Power Competence Centre, *That Others May Live to Return With Honour: A Primer*, Combat Support Branch, January 2011, 29.

DOD Directive 5100.01, *Functions of the Department of Defense and Its Major Components*, 21 Dec 2010, 34.

⁸⁵ JWP 3-66 *Joint Personnel Recovery*, April 2003, 1-1.

specify what level of capability meets the moral obligation, the United Kingdom also values the recovery of its personnel.

The USAF PR Core Function Concept asserts that “the rescue mission area is valued by most countries and is usually viewed as a non-threatening positive mission.”⁸⁶ It also notes that the rescue mission area offers “unique engagement opportunities that can build or reinforce long-lasting partnerships,” and National Security Presidential Directive 12, Annex 1, contains a call to build those partnerships.⁸⁷ But, on the other hand, the Institute for Defense Analyses (IDA) points out that no other country shares the US ‘cultural imperative’ to leave no man behind.⁸⁸ The IDA asserts that although no other nation has the ability to provide stand-alone PR capability without US training, leadership, and assets, coalition partners are aware of the US cultural imperative and hold the United States to a higher standard.⁸⁹ “Because of America’s relatively plentiful military resources, [other countries] expect US recovery forces to behave as a ‘big brother’ and recover allied and coalition isolated personnel just as [the United States] would recover our own personnel.”⁹⁰ This buck-passing relationship may change as fiscal constraints change the structure of the US military.

The NATO PR policy states “the isolation, capture, and/or exploitation of NATO personnel during operations could have a significant negative impact on operational security, morale of assigned forces, and public support. In addition, NATO operations rely on contract support and interaction with other non-military organizations, for which NATO may have a responsibility. The Alliance therefore requires a system to recover military and civilian personnel that have become isolated.”⁹¹ The Institute for Defense

⁸⁶ United States Air Force, *Air Force Personnel Recovery Core Function Concept* 2013, 17.

⁸⁷ US Joint Forces Command, *Assessment of Combat Search and Rescue Requirements in a Joint Context*, Joint Personnel Recovery Agency, 13 August 2009, 49.

United States Air Force, *Air Force Personnel Recovery Core Function Concept* 2013, 18.

⁸⁸ Institute for Defense Analyses, *Improving Personnel Recovery in a Coalition Environment*, IDA Paper 3705, May 2002, 10.

⁸⁹ Institute for Defense Analyses, *Improving Personnel Recovery in a Coalition Environment*, IDA Paper 3705, May 2002, 10.

Humans are unable to make sense of the suffering of an isolated person; therefore we seek a way to be delivered from it. See Nikolas Rose, “The Value of Life: Somatic Ethics and the Spirit of Biocapital,” (*Daedalus*, Winter 2008, 36-48), 46.

⁹⁰ US Joint Forces Command, *Assessment of Combat Search and Rescue Requirements in a Joint Context*, Joint Personnel Recovery Agency, 13 August 2009, 49.

⁹¹ Joint Air Power Competence Centre, *That Others May Live to Return With Honour: A Primer*, Combat Support Branch, January 2011, 18.

Analyses has a bifurcated response to this need. It recommends a theater SAR alliance as a way to cost-share, but it also recommends that US forces be responsible for all combat recoveries.⁹² It also recommends against implementing a policy that allows coalition assets to recover US personnel.⁹³ It cites the potential for technology transfer to future adversaries and the loss of actual combat capability for the training process as two drawbacks of the SAR alliance.⁹⁴

Jim McElhenney, Executive Director of the ‘That Others May Live’ Foundation, was a PR officer in NATO’s Northern Region from 2002-2005.⁹⁵ His experience was that there are differences within NATO based on different national capabilities and ‘national caveats,’ but for the most part, NATO countries will follow the United States’ tactical lead.⁹⁶ On the strategic level, however, he felt that NATO was “much more risk averse [as a group] than any single country within the alliance.”⁹⁷ This disparate view of risk tolerance could lead to difficulties preparing a NATO rescue policy.

Lastly, when building partner capacity, medical evacuation (MEDEVAC) and search and rescue (SAR) are high payoff capabilities for legitimizing a government.⁹⁸ Is it hypocritical then to send US Aviation Foreign Internal Defense troops to foreign countries to build up their MEDEVAC and SAR capabilities if the United States is considering downsizing or restructuring its own? What is the real prestige payoff of PR capability, and how can that be measured? These are all questions that must be thought through regarding the decision to acquire rescue capability, as the cultural value of rescue may vary across different countries.

Across Services

The cost of rescue and leadership’s willingness to spend the resources to rescue

⁹² Institute for Defense Analyses, *Improving Personnel Recovery in a Coalition Environment*, IDA Paper 3705, May 2002, 1.

⁹³ Institute for Defense Analyses, *Improving Personnel Recovery in a Coalition Environment*, IDA Paper 3705, May 2002, 1.

⁹⁴ Institute for Defense Analyses, *Improving Personnel Recovery in a Coalition Environment*, IDA Paper 3705, May 2002, IV-4.

⁹⁵ Jim McElhenney, Executive Director of the ‘That Others May Live’ Foundation, personal email to author, 2014.

⁹⁶ Jim McElhenney, Executive Director of the ‘That Others May Live’ Foundation, personal email to author, 2014.

⁹⁷ Jim McElhenney, Executive Director of the ‘That Others May Live’ Foundation, personal email to author, 2014.

⁹⁸ US Air Force. Irregular Warfare Tiger Team Final Report, 22 May 2009, 5.

might also vary across the services, as might the overall mission impact of isolated persons. Joint doctrine clearly states that “each Service Chief, and Commander, United States Special Operations Command (USSOCOM), is responsible for organizing, training, and equipping their forces for PR”⁹⁹ Tim Healy believes every service goes through this debate on what it takes to retrieve their members and how much they have to spend towards the capability they feel is required.¹⁰⁰ He points out that some services have robust “organic” capability in that their regular forces are well suited to retrieve members of their own units, like an Army company retrieving an isolated platoon or patrol.¹⁰¹ Those services do not feel a need for ‘dedicated’ capability beyond that already required for their mission.

The big difference between the Air Force and the other conventional services is the size of the battlefield.¹⁰² In a conventional war with defined battlespaces, the Army and Marine Corps have relatively small areas of responsibility. Air Force PR, however, must consider the deep battlefield their domain and act as theater assets instead of battlefield assets. Unlike the Army whose organic capability covers a large portion of their need, the Air Force spends billions to cover the ‘high end’ of the recovery spectrum. Due to the requirement to cover vast distances, penetrate enemy air and ground defenses to the terminal area, and return again to friendly territory, the Air Force maintains specialized equipment.

While the Army has a high volume of less specialized forces, the Air Force tends to have a low volume of more specialized forces. Because the Air Force relies on its highly trained pilots, it is willing to expend more resources to have specialized recovery forces on hand. The Navy also has highly trained pilots to recover, but with the exception of limited deep strike and Naval Special Warfare assets, it is concerned primarily with overwater and carrier strike group operations rather than deep battlefield penetration. The service perspective is blurred, though, when assets of one service are called upon to rescue members from a different service. The 3rd Aerospace Rescue and Recovery Group, an Air Force rescue unit in Vietnam, rescued more Army personnel

⁹⁹ *JP 3-50*, (Washington, DC: Chairman of the Joint Chiefs of Staff, 2011), xi.

¹⁰⁰ Tim Healy, personal email to author, 2013.

¹⁰¹ For more information, see Army Field Manual 3-50.1.

¹⁰² Personal email from James McElhenney, Executive Director, That Others May Live Foundation. Nov 2013.

than Air Force.¹⁰³ Perhaps the bottom line is that all rescue assets are inherently joint because when someone needs help, the rescue assets will put forth effort without regard to service.¹⁰⁴

Across Time

The cost of rescue and leadership's willingness to spend the resources to rescue might even vary across different times of conflict within the same service or country. Darrel Whitcomb points out that "an inverse relationship appears to exist between the level of effort directed toward combat search and rescue and the level of military and political effort and commitment involved in any particular conflict."¹⁰⁵ It appears that in total war, PR is limited; and in limited war, where a limited cost is desired, PR is an area of maximum effort.¹⁰⁶ This can contribute to a varying level of interest across time, even for the same service or country, as the rescue forces are tailored to the total or limited war context.

The dedication to rescue may also increase or decrease in volume or importance over time due to technology. The United Kingdom's personnel recovery regulation states, "The strategic factors [of personnel recovery] are likely to include the recovery of tactical intelligence that may fall into adversary hands and the protection of high value capital assets."¹⁰⁷ As unmanned technology increases, the volume of need for PR decreases, but the need for PR will not disappear until the United States is conducting war with 100% unmanned assets and no human warriors leave the boundary of friendly territory. Even though the volume of PR may decrease as a result of lower exposure to threat environments, the strategic consequences will not necessarily decrease because each asset is perhaps strategically more important than it used to be. Each potential POW today may have much more knowledge of sensitive information, such as technological advances or upcoming plans, than an average infantryman in the Korean War.

¹⁰³ Search and Rescue in Southeast Asia (November 1967-June 1969). CHECO Report., K717.0414-1, pg 65, in USAF Collection, AFHRA. Document is now declassified.

¹⁰⁴ Search and Rescue in Southeast Asia (November 1967-June 1969). CHECO Report., K717.0414-1, pg 65, in USAF Collection, AFHRA. Document is now declassified.

See also Air Force Doctrine Document 3-50, pg viii.

¹⁰⁵ Darrel Whitcomb, "Combat Search and Rescue: A Longer Look," (*Aerospace Power Journal*, Summer 2000), 28.

¹⁰⁶ Darrel Whitcomb, "Combat Search and Rescue: A Longer Look," (*Aerospace Power Journal*, Summer 2000), 34.

¹⁰⁷ JWP 3-66 *Joint Personnel Recovery*, April 2003, 4-1.

In summary, acquiring PR forces is not a guarantee that a country will never have a POW or have people that repatriate without the help of PR forces.¹⁰⁸ Many, including William Andrews whose case is studied in Chapter Three, are picked up by the enemy before PR forces ever have a chance. Those that land in evasion-friendly environments may self-recover or hide until non-PR forces pick them up. But for those who are not immediately captured and do not land in evasion-friendly environments, a country's decision to acquire rescue capability is their first step to freedom.

The Decision to Use PR Capability

Even once the decision has been made to acquire rescue capability, there has not always been a willingness to commit these resources for personnel recovery for various cultural, political, and operational reasons based on location of the isolated personnel. William Andrews stated, "When I was in Germany during the Cold War, we assumed nobody was coming for us on the other side of the forward line of troops if the balloon went up. I also found a convention among flyers in Rolling Thunder that "if you went down north of the Red [River], you didn't even wait for each other. If you couldn't keep" your aircraft going "until back over...the Red, there was no rescue."¹⁰⁹

In some PR cases, particularly recovery of personnel from other government departments or during operations other than war, the potential positive impact of a rescue might be over-ruled by political considerations. When Francis Gary Powers was shot down over Russia in 1960, the United States did not launch a rescue mission.¹¹⁰ The closest rescue forces were more than 1,000 miles away in Europe and had neither the training nor the equipment to perform a rescue that would penetrate deep into Soviet sovereign airspace—a sensitive subject at the time as Powers was covertly over Soviet airspace when he was shot down.¹¹¹ Similarly, when the EP-3 was forced down onto

¹⁰⁸ There is an element of humility in admitting that the United States, as powerful as it is, cannot recover everyone. The USAF PR Core Function Concept concedes that "all isolated persons may not be recoverable and there may not be rescue forces available to recover all recoverable isolated persons." See United States Air Force, *Air Force Personnel Recovery Core Function Concept 2013*, 17.

¹⁰⁹ William Andrews, personal email to author. 2014. Source of original quote is William C. Norris' interview for the AFHRA, page 50.

¹¹⁰ Lee Pera, Paul Miller, and Darrell Whitcomb, "Personnel Recovery," *Air and Space Power Journal* (Nov-Dec 2012): 91.

¹¹¹ Lee Pera, Paul Miller, and Darrell Whitcomb, "Personnel Recovery," *Air and Space Power Journal* (Nov-Dec 2012): 91.

Hainan Island in 2001, the United States did not stage a rescue to recover the crew from Chinese control.¹¹²

The decision to use rescue is perhaps eclipsed only by the decision to not to do so, or to stop an ongoing rescue effort. A Project CHECO report on USAF Search and Rescue in Vietnam notes that mission closure, suspension, or withdrawal of a valid mission before recovery was complete was allowed only when there could be “no further value in the continued use of the SAR task force” or “recovery was extremely doubtful due to hostile activity, probable capture, or time lapse.”¹¹³ Both of these conditions required approval from the 7th Air Force commander before the SAR mission could be terminated, and the commander had no regulations to guide his decision on when the cost was too high and the survivor had to be abandoned.¹¹⁴ During the period from July 1966 – November 1967, 419 airmen survived a bailout or crash landing in a hostile environment in the Vietnam theater of operations. Of the 419 survivors, “197 airmen had no SAR effort exerted on them, due to a variety of circumstances that ranged from a completely unlivable environment for the SAR force to actually observing the pilot being captured or killed.”¹¹⁵

What then is a ‘reasonable chance of success’ and what is it worth? Even when the capability for PR exists, leaders may—correctly or incorrectly--choose not to use it if they feel there is no reasonable expectation of a successful rescue. For example, Bengal 15, the UH-60 helicopter that was coming to rescue William Andrews, crashed in the Iraqi desert. The Apache helicopter pilots escorting Bengal 15 reported that the crash was completely unsurvivable and relayed that no rescue attempt should be made.¹¹⁶ The pilots’ assessment was incorrect—three individuals did in fact survive the crash and were

Powers’ situation could be repeated for other Title 50 activities where the US role is not apparent or not publically acknowledged.

¹¹² Andrew Brookes, *Destination Disaster: Aviation Accidents in the Modern Age* (Hersham: Ian Allan, 2002), 101-110

Also, no rescue mission was launched for the crew of the USS Pueblo in 1968.

¹¹³ Search and Rescue in Southeast Asia (November 1967-June 1969). CHECO Report., K717.0414-1, pg 14-15, in USAF Collection, AFHRA. Document is now declassified.

¹¹⁴ Earl Tilford, Jr. *The United States Air Force Search and Rescue in Southeast Asia*, (Washington, D.C.: Office of Air Force History, United States Air Force, 1980), 119.

Search and Rescue in Southeast Asia (November 1967-June 1969). CHECO Report., K717.0414-1, pg 14-15, in USAF Collection, AFHRA. Document is now declassified.

¹¹⁵ Search and Rescue in Southeast Asia (July 1966-November 1967). CHECO Report., K717.0414-1, pg 21, in USAF Collection, AFHRA. Document is now declassified.

¹¹⁶ Rhonda Cornum, *She Went to War* (Novato, CA: Presidio Press, 1992), 166.

taken captive by the Iraqis.¹¹⁷ Thus the ‘reasonable chance of success’ judgment is not always a reliable indicator for when to utilize PR capability.

Along those lines, what is the strategic value of an isolated person in relation to risk to US assets? For example, which of these have more strategic value: a general or a captain, a stealth pilot or a transport pilot, a pilot or a supply clerk, a female or a male, and a civilian or a military member? Strategic value must be weighed according to factors such as prospective media attention designed to influence US national will as well as direct effect on military strategy. The media effect on calculating strategic value has increased exponentially in recent years as reporters are allowed and able to be closer to the battlefields. Understanding strategic value is key to the decision to use rescue.

Potential professional return on investment from a rescue effort is also an interesting consideration, but it can be impossible to predict the return on investment beforehand. For example, Captain Scott O’Grady was an F-16 pilot rescued after being shot down in the Balkans. He got out of the military shortly after his rescue.¹¹⁸ Lieutenant Colonel Goldfein, another F-16 pilot rescued after being shot down in the Balkans, stayed in the Air Force after his rescue and is now a three-star general.¹¹⁹ Did the United States have a greater return on its rescue investment into General Goldfein than it did on Captain O’Grady? If the isolated person’s service intentions for the future are known, is it ethical to consider potential return on investment in the rescue risk calculations?

The tactical considerations of rescue are also key to the use decision. “Every capture of a live American is a tactical event with potential for adverse strategic impact,” states the 2009 Assessment of Combat Search and Rescue Requirements in a Joint Context.¹²⁰ The United Kingdom’s personnel recovery regulation, JWP 3-66, asserts that since “not all of the strategic factors would necessarily apply across the full spectrum of joint personnel recovery; the risk analysis necessary prior to the execution of a personnel

¹¹⁷ Rhonda Cornum, *She Went to War* (Novato, CA: Presidio Press, 1992), 167.

¹¹⁸ <http://therockwallnews.com/2011/0803/government/ogrady> Accessed 11 May 14.

¹¹⁹ <http://www.af.mil/AboutUs/Biographies/Display/tabid/225/Article/108013/lieutenant-general-david-l-goldfein.aspx> Accessed 11 May 14.

<http://www.jbsa.af.mil/news/story.asp?id=123335461> Accessed 11 May 14.

¹²⁰ US Joint Forces Command, *Assessment of Combat Search and Rescue Requirements in a Joint Context*, Joint Personnel Recovery Agency, 13 August 2009, 17.

recovery mission is predominantly based upon the tactical factors.”¹²¹ These tactical factors may include assets available, asset capability, condition of the isolated person, degree of care available following rescue, and other ongoing operations.¹²²

JWP 3-66 also offers a good discussion of risk management factors to consider. It states that combat rescue operations must not “unduly risk isolating additional personnel, preclude execution of higher priority missions, routinely expose certain high value assets to unacceptable risk, divert critically needed forces from ongoing operations, or allow the overall military situation to deteriorate.”¹²³ The aim of this risk analysis is to evaluate the probability of success based on available intelligence, threat assessment, recovery assets and method, environment, and timing.¹²⁴ If the threat assessment is high, such as in a non-permissive environment, the only way to penetrate the airspace may be to use protected technology. Under what conditions will the United States risk its technology to get its personnel back? If the technology is captured or compromised during the rescue attempt, it will no longer be available for its original purposes. Therefore, if the USAF fails to execute proper risk management for PR in non-permissive environments, it may undertake missions that limit the USAF’s ability to provide options and accomplish assigned missions?

The risk analysis boils down to balancing risk to personnel against risk to mission. But sometimes risk to personnel can change the risk to mission. In the immediate aftermath of the 9/11 attacks, President Bush was anxious to begin military operations. General Richard Myers believed that the United States could not begin military operations until CSAR [combat search and rescue] was in place, a view shared by National Security Advisor Condoleezza Rice.¹²⁵ Rice believed that a downed pilot in Al Qaeda’s hands would change the terms of the debate, giving them “immense leverage.”¹²⁶ Even if it was culturally acceptable to give an aviator long-term evasion training and tell them they are on their own if shot down, it may not be acceptable in light of the risk analysis. Thus, even if a fighter pilot does not really want “two helicopters full

¹²¹ JWP 3-66 *Joint Personnel Recovery*, April 2003, 4-1.

¹²² JWP 3-66 *Joint Personnel Recovery*, April 2003, 4-1.

¹²³ JWP 3-66 *Joint Personnel Recovery*, April 2003, 4-2.

¹²⁴ JWP 3-66 *Joint Personnel Recovery*, April 2003, 4-2.

¹²⁵ Bob Woodward, *Bush at War*, (New York: Simon and Schuster, 2002) , 178.

¹²⁶ Bob Woodward, *Bush at War*, (New York: Simon and Schuster, 2002) , 178-179.

of men risking death just to keep him out of a POW camp,” that may be exactly what the risk assessment concludes is the correct action.¹²⁷

The Decision to Eliminate PR Capability

Can I, should I, must I?

Emile Simpson, War From The Ground Up

The most difficult decision of all is often the one *not* to attempt a save, either by not acquiring rescue capability or deciding not to use it in a given scenario. But what are the ethical implications of choosing to eliminate a PR capability? If a nation chooses to prioritize its budget in a way that reduces the current level of capability, is it any more culpable than a nation who never acquired that capability to begin with? The answer depends on the context, of course, but modern society seems to hold that the nation that eliminates capability is somehow guilty of abandoning faith with isolated persons. This makes it difficult for nations who must cut budgets and are unable to retain every capability at the same level with the new fiscal restraints.

If the ethical implications of laying down PR capability seem fuzzy, perhaps it is easier to focus on the strategic implications. JWP 3-66 says that “at the operational level it is desirable to retain freedom of action through avoidance of a [hostage] situation. This prevents involuntary release of intelligence and enemy exploitation of a propaganda opportunity.”¹²⁸ However, is there also freedom of action gained by the ability to say that some members of the US military are expendable and operations will continue as planned?¹²⁹ Colin Gray states “anything of great strategic importance to one belligerent, for that reason has to be worth attacking by others.”¹³⁰ US National Security Presidential Directive 12 expresses this idea as the desire to “deter the practice of hostage taking by

¹²⁷ Robert Haston, *How An Actuarial Scientist Might Look At Life, Death, and Dollars in Military Personnel Recovery*, unpublished manuscript. Personal email to author, 2013.

¹²⁸ JWP 3-66 *Joint Personnel Recovery*, April 2003, 1-1.

¹²⁹ General James Jones, a Marine and former commander of European Command, states, “The military must have a ‘social contract’ with the troops and must never see them as expendable.” Does this handicap commanders from executing strategy that costs lives, either practically through rules or mentally through guilt? If so, does the United States need or want to assume this risk of potentially not being able to execute the necessary strategy? Jones quote from Lee Pera, Paul Miller, and Darrell Whitcomb, “Personnel Recovery,” *Air and Space Power Journal* (Nov-Dec 2012): 86.

¹³⁰ Colin S. Gray, *Another Bloody Century: Future Warfare* (London: Phoenix, 2006), 307.

eliminating value and countering other motivating factors.”¹³¹ If individual troops are replaceable tactically, and the US public could avoid being stirred up by media frenzy over body counts, the enemy would be in a much weaker position with regard to their power to hurt the United States through exploiting isolated persons. The media frenzy and public outcry that occurs over each isolated member just encourages the enemy to keep using this tactic. If the enemy was less successful in exploiting an isolated person, it would interest him less. It is this same mindset that led to the US stance of non-negotiation with terrorists—giving concessions only makes others want to do it that much more.

But the likelihood of ending the media frenzy and public outcry over each lost service member seems unlikely. In fact, the United States seem to be moving towards placing even more value on each individual life. Qiao Liang and Wang Xiangsui, two senior colonels in the Chinese People’s Liberation Army, expressed their agreement with this assessment in their book *Unrestricted Warfare*. They state:

The appearance of high technology weaponry can now satisfy [the] extravagant hopes of the American people. During the Gulf War, of 500,000 troops, there were only 148 fatalities and 458 wounded. Goals that they long since only dreamt were almost realized -- "no casualties." Ever since the Vietnam War, both the military and American society have been sensitized to human casualties during military operations, almost to the point of morbidity. Reducing casualties and achieving war objectives have become the two equal weights on the American military scale. These common American soldiers who should be on the battlefield have now become the most costly security in war, like precious china bowls that people are afraid to break. All of the opponents who have engaged in battle with the American military have probably mastered the secret of success - if you have no way of defeating this force, you should kill its rank and file soldiers.”¹³²

Indeed, if the china is so precious that its owner will not risk using it, it will never serve the purpose for which it was made. An elimination of PR capability would only exacerbate this weak point.

However, it is still important to ask the question, “What do dedicated PR forces bring to the fight?” They bring back a handful of isolated members, which takes it back to the bottom line: how much is that handful of members worth? As Carl von

¹³¹ National Security Presidential Directive 12, 18 Feb 02, Appendix A, para I.2. This paragraph is unclassified.

¹³² Liang and Wang, *Unrestricted Warfare*, accessed at <http://www.c4i.org/unrestricted.pdf> on 2 Apr 14.

Clausewitz asserts, “means can never be considered in isolation of the purpose.”¹³³ The United States touts that their service members’ training is worth a certain dollar figure to the US government, but many of the members who get rescued do not even go back to the same job, at least not in the same capacity. There are also no documented cases of the United States losing a war due to information revealed by an isolated person under duress. Similarly, it is not a systemic problem that if no rescue is anticipated for an area, such as going down beyond the Red River in Vietnam, members will refuse missions there. During the Vietnam conflict, the pie-shaped area north of Hanoi from the Red River on the northwest to the railroad complex northeast to Lang Son was denied to SAR forces, and pilots still flew missions in that area.¹³⁴ Eighty-eight airmen went down in this area and were denied a SAR effort, and 29 airmen downed along the Gulf of Tonkin coast were also denied SAR due to the heavily defended coastline.¹³⁵ Members simply accepted the situation as part of their job. This brings into question some of the most often-cited reasons strategic purposes for maintaining PR and illuminates the difficult issues at hand when considering the elimination of PR capability.

Summary

This chapter first gave a brief historical look at prevailing US views on personnel recovery. The second section described US beliefs about personnel recovery ascertained from its core documents. The third section described value of life considerations and how they may relate to personnel recovery perceptions, while the final section examined the issues around three decisions: the decision to acquire PR capability, the decision to use it, and the decision to eliminate that capability.

In December 1969, Lieutenant Woodrow Bergeron, Jr., the navigator of an F-4C with the callsign Boxer 22, was shot down by antiaircraft guns during a mission near Ban Phanop, Laos.¹³⁶ In the course of Bergeron’s recovery, one pararescueman lost his life

¹³³ Carl von Clausewitz, *On War*. Edited and translated by Michael Howard and Peter Paret. (Princeton, NJ: Princeton University Press, 1976), 87.

¹³⁴ Search and Rescue in Southeast Asia (July 1966-November 1967). CHECO Report., K717.0414-1, pg 22, in USAF Collection, AFHRA. Document is now declassified.

¹³⁵ Search and Rescue in Southeast Asia (July 1966-November 1967). CHECO Report., K717.0414-1, pg 22, in USAF Collection, AFHRA. Document is now declassified.

¹³⁶ Escape and Evasion, Southeast Asia (1964-1971). CHECO Report., K717.0414-27, pg 39-40, in USAF Collection, AFHRA. Document is now declassified.

and several others were wounded.¹³⁷ Five out of ten helicopters that were damaged in the rescue never flew again, and five A-1s were also heavily damaged.¹³⁸ In the end, 336 sorties were flown to save Lieutenant Bergeron, and “no one asked if the life of one man was worth all the effort.”¹³⁹ The next chapter explores the question “Was it worth it?” in greater detail by examining the costly rescue missions for Bat 21B, Oyster 01B, and Mutt 41.



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¹³⁸ Earl Tilford, Jr. *The United States Air Force Search and Rescue in Southeast Asia*, (Washington, D.C.: Office of Air Force History, United States Air Force, 1980), 119.

¹³⁹ Earl Tilford, Jr. *The United States Air Force Search and Rescue in Southeast Asia*, (Washington, D.C.: Office of Air Force History, United States Air Force, 1980), 119.

Chapter 3

Case Studies

No matter what era, area, or circumstance, rescue has always been one of the great human interest stories . . . there is no saga quite as inspiring, as exhilarating, or as dramatic as that of man risking serious injury or death itself to help his fellow man in trouble.

L.B. Taylor, Jr., Author “That Others May Live”

Introduction

The combat rescue scenario gives a unique opportunity to contemplate the idea of what a life is worth. Society frames the value of an item in terms of what one is willing to give up in exchange for that item, such as being willing to give up \$20,000 in exchange for a car or eight hours of time in exchange for a \$200 paycheck. In a combat rescue scenario, the exchange decision comes down to deciding what amount of lives, material, or battlefield initiative a leader is willing to give up in exchange for the life of an isolated person.

To assist in evaluating the main question of this thesis, this chapter provides three case studies of military personnel recovery missions. The first case study is Bat 21B, the rescue of Lieutenant Colonel Icaal “Gene” Hambleton from North Vietnam in April 1972. This case study, recorded as the longest and most costly rescue of the Vietnam War, illustrates an enormous expenditure of lives and material for the recovery of one man. The second case study is Oyster 01B, the rescue of Captain Roger Locher deep behind enemy lines in North Vietnam in June 1972. This study, recorded as the deepest rescue behind enemy lines of the Vietnam War, illustrates the amount of battlefield initiative the United States was willing to sacrifice for the recovery of one man. The final case study is Mutt 41, the attempted rescue of Captain William Andrews, a pilot shot down over Iraq in February 1991. This study illustrates the willingness of the United States to risk lives and material for the recovery of one man, even when the probability of success is low.

The costs of recovery are multi-faceted. There can be tactical, strategic, political, and personal costs, as well as purely economic ones. An example of a tactical cost could be a loss of battlefield initiative due to loss of use of an asset either from its dedication to the rescue or from its destruction in the course of rescue. A strategic cost could result when coalition goals are placed behind the recovery effort of a US serviceman and coalition partners question US commitment to the cause. A political cost could be seen when taxpayers question lawmakers on the enormous cost of a rescue effort or the rescue assets themselves, and the economic costs may be detrimental to the financial stability of the United States. Lastly, the personal costs of recovery could include the risks undertaken by those sent out to rescue the isolated person, and the risks their families must assume in the potential loss of their loved ones.¹

In addition to examining the costs of recovery, the costs of non-recovery--tactical, strategic, political, and personal, as well as purely economic--must also be examined. There are multi-faceted impacts in the instances where US forces did not, for various reasons, get an isolated person back to friendly control before he was captured by the enemy. A failure to recover can have tactical costs such as lack of freedom on the battlefield as areas are cordoned off to protect possible prisoner locations and the loss of key information if prisoners are unable to resist interrogation. Failure to recover could also have strategic costs, such as when the failure to recover downed aircrew in Mogadishu in 1993 caused public pressure on President Clinton to withdraw troops from Somalia.² Failure to recover can have political costs, such as the failure to rescue Americans held captive in Iran in 1980 which had a negative effect on President Carter's

¹ The rescued persons often have a keen appreciation for their rescuers personal costs. Kurt Muse, rescued from a Panamanian jail in 1989, still calls his rescuers every year on the anniversary of the rescue. Lt Gen Goldfein, an F-16 pilot rescued after being shot down in the Balkans, is rumored to do likewise. Sources: Kurt Muse, *Six Minutes To Freedom*, (New York, NY: Kensington Publishing, 2006).

²Lee Pera, Paul Miller, and Darrell Whitcomb, "Personnel Recovery," *Air and Space Power Journal* (Nov-Dec 2012): 98-99.

Another example of strategic cost of non-recovery would have been if Lt Col Darrell Zelko, pilot of the F-117 shot down in the Balkans in 1999 under the callsign Vega 31, would not have been recovered. The secret F-117 information that might have been lost had Zelko fallen into enemy hands would have been detrimental to the strategic security of the United States.

<http://iconicphotos.wordpress.com/2010/03/10/u-s-marine-dragged-through-mogadishu/> Accessed 22 Mar 14.

bid for reelection.³ Finally, the personal costs of non-recovery can be the most influential of all—leaders are left to question if they made the right decisions, and families are left waiting at home for a loved one who may never return.

Therefore, the following three case studies are an examination of the life, material, and battlefield initiative expended in the recovery attempts of three isolated Americans, as well as the tactical, strategic, political, and personal effects of those recovery attempts. The cases were chosen for their ability to illustrate the costs of recovery or non-recovery, and while there are obviously military and civilian personnel from all services that become isolated on land or at sea, these case studies are all aviators. Due to having areas of operation that are typically behind enemy lines, downed aviators generally provide the most demanding recovery scenarios, therefore driving up the potential costs of recovery.⁴

Case 1—Bat 21B

*“Was one man’s life worth more than the lives of two OV-10 crewmembers, five crewmen in the HH-53, and the crew of the Army Huey chopper that were lost during the rescue operation?”*⁵

Earl Tilford

Biographical Information

When Lieutenant Colonel Iceal “Gene” Hambleton was shot down on 2 April 1972, he was 53 years old—much older than the average American evader in the jungle of South Vietnam.⁶ Born on 16 November 1918, Colonel Hambleton was on his third war: he served in World War II as a radio operator, flew 43 combat missions in Korea, and was on his 63rd combat mission in Vietnam when the EB-66C he was flying in was

³ http://usatoday30.usatoday.com/news/washington/2010-09-17-iran-hostages-jimmy-carter_N.htm Accessed 22 Mar 14.

⁴ United States Air Force, *Air Force Personnel Recovery Core Function Concept 2013*, 3.

⁵ Earl Tilford, Jr. *The United States Air Force Search and Rescue in Southeast Asia*, (Washington, D.C.: Office of Air Force History, United States Air Force, 1980), 118.

⁶ Oral interview of Iceal E. Hambleton by Stanley L. Busboom, 17-18 November 1989, Tucson, Arizona. Published as Appendix 3 to *Bat 21: A Case Study* (Carlisle Barracks, Pennsylvania: U.S. Army War College, 1990), 76. Annotated hereafter as ‘Hambleton Interview’ with the corresponding page number from Appendix 3 in the Busboom case study. References to other portions of the Busboom case study will be noted as ‘Busboom’ with a page number.

shot down.⁷⁸ Colonel Hambleton was a radar navigator by trade, flying on B-29 bombers for many years, but changed career fields and spent ten years in missile operations after Korea.⁹ As Vietnam raged on, he requalified for flight duty and arrived at Korat Air Base in Thailand in 1971 to assume duty as his unit's senior navigator.¹⁰

Context

Colonel Hambleton was in Vietnam at the close of the Commando Hunt VII air interdiction campaign and the opening of the Spring 1972 Easter Offensive, in which the North Vietnamese Army (NVA) launched a massive conventional campaign to capture territory in South Vietnam, beginning with the area around Quang Tri.¹¹ B-52s flew bombing missions to counter Vietnamese troop concentrations, and they took EB-66 Electronic Warfare aircraft with them to protect against Surface to Air Missiles (SAMs).¹² The EB-66 crews viewed their missions as “milk runs” because they were near the Demilitarized Zone (DMZ) where the intensity of defenses was less than route packages faced further north near Hanoi.¹³

Mission

The mission of EB-66s in Vietnam was electronic countermeasures. One of the EB-66's other methods of countering threats, however, was to “troll” for Surface-to-Air Missiles (SAMs), flying 7,000-8,000 feet below the B-52 formations flying bombing and interdiction missions.¹⁴ Flying along at 30-32,000 feet, the EB-66s would electronically jam SAM sites if the sites turned on their radars.¹⁵ Despite the jamming, some of the sites got a shot off, and the EB-66s would wait until the missile had locked on to their aircraft before making diving and turning maneuvers to defeat the missile.¹⁶ In his 63 missions, Colonel Hambleton and his crew had successfully used this ‘bait and defeat’ method nearly 100 times, perhaps leading to a sense of invulnerability.¹⁷

⁷ Darrel D. Whitcomb, *The Rescue of Bat 21* (Annapolis, MD: Naval Institute Press, 1998), 25.

⁸ Busboom, 3.

⁹ Hambleton interview, 65-66.

¹⁰ Hambleton interview, 66-67.

¹¹ Busboom, 10.

¹² Hambleton interview, 68-69.

¹³ Hambleton interview, 65.

¹⁴ Hambleton interview, 68-69.

¹⁵ Hambleton interview, 69.

¹⁶ Hambleton interview, 69-70.

¹⁷ Hambleton interview, 65, 69.

Shootdown

As the NVA pushed south to begin its offensive, it brought with them a massive arsenal of anti-aircraft weapons, to include SAMs—the first SAMs in South Vietnam.¹⁸ On the day of the Bat 21 shootdown, the SAM site that fired the missiles did not turn on its radar but instead fired optically at the aircraft's contrail.¹⁹ The crew was looking for and planning to react to a normal sequence of three colored lights on a cockpit scope, but the first two never came due to the optical launch.²⁰ The first indication Colonel Hambleton had in the aircraft was the launch light, which put the crew behind in their reaction plan—they thought they still had five more seconds when the SA-2 missile impacted the rear half of the aircraft.²¹

Colonel Hambleton's pilot gave him the signal to eject, and as Colonel Hambleton did so, the aircraft exploded violently beneath him as a second missile impacted the aircraft.²² All five remaining crewmembers onboard Bat 21 perished in the explosion, leaving Colonel Hambleton as the lone survivor.²³ Colonel Hambleton opened his parachute at 29,000 feet and began to communicate on his radio to the Forward Air Controller (FAC) beneath him.²⁴ Despite the FAC's quick work using fighters to sanitize the area during Colonel Hambleton's 16-minute parachute ride, the situation was dire: Colonel Hambleton had been shot down over a full North Vietnamese Army division of about 30,000 heavily equipped troops with an integrated command system in the middle of an invasion corridor.²⁵

Rescue

Despite being often recalled in search and rescue history, Colonel Hambleton was neither located nor retrieved by conventional rescue forces. Colonel Hambleton, known on the radio as Bat 21B (his evader callsign with aircraft and crew position identifier),

¹⁸ Busboom, 6.

¹⁹ Hambleton interview, 70.

²⁰ Hambleton interview, 70.

²¹ Hambleton interview, 68, 70.

²² Hambleton interview, 71.

²³ Hambleton interview, 71.

²⁴ Hambleton interview, 71-72.

²⁵ Stephen P. Randolph, *Powerful and Brutal Weapons* (Cambridge: Harvard University Press, 2007), 69.

Dwight Jon Zimmerman and John Gresham, *Beyond Hell and Back: How America's Special Operations Forces Became the World's Greatest Fighting Unit* (New York: St. Martin, 2008), 320.

Hambleton interview, 71.

assisted with his rescue by contacting the FAC, giving his location, and calling in airstrikes.²⁶ The FAC organized the first rescue attempt by calling for anyone airborne, but this 'pick-up' game ended in disaster when the NVA shot down a UH-1H (Blueghost 39).²⁷ Three of its crewmembers were killed and another was taken prisoner.²⁸ Another helicopter gunship was battle damaged and forced to make an emergency landing nearby.²⁹ The next morning an OV-10 FAC aircraft (Nail 38) was shot out of the sky, leaving one pilot captured and another evading on the ground not far from Hambleton.³⁰ Rescue attempts continued, and on one of the subsequent attempts, a Jolly Green rescue helicopter (Jolly 67) was shot down and its crew of six was killed.³¹ The next day another OV-10 FAC (Covey 282) was shot down, and both pilots eventually died on the ground.³² Still, the FACs continued to use everything at their disposal, resorting to shooting marker rockets to keep away enemy patrols and diverting B-52 ARC LIGHT missions to bomb enemy advances.³³

As it became evident that a traditional helicopter rescue was not going to work, ground forces hatched a rescue plan to walk Colonel Hambleton to a river where he would be rescued by a Navy SEAL and his Vietnamese counterpart.³⁴ Knowing that Colonel Hambleton was an avid golfer, his rescue planners came up with a series of golf holes to direct his movements on the open radio channel so that the enemy would not be able to anticipate his route.³⁵ When he reached the river, Navy Lieutenant Thomas Norris exfiltrated him to safety hidden in the bottom of a wooden sampan boat.³⁶ Lieutenant Norris' heroic efforts earned him the Congressional Medal of Honor.³⁷

²⁶ Hambleton interview, 72. Busboom, 16-17.

²⁷ Busboom, 17.

²⁸ Whitcomb, *Bat 21*, 36.

²⁹ Whitcomb, *Bat 21*, 36.

³⁰ Busboom, 17.

³¹ History of the 56th Special Operations Wing, Volume II: April, May, June 1972. K-WG-56-HI, Apr-Jun 1972, v2, Document 23, in USAF Collection, AFHRA. Document is now declassified.

³² History of the 56th Special Operations Wing, Volume I: April, May, June 1972. K-WG-56-HI, Apr-Jun 1972, v1, pg 108-111, in USAF Collection, AFHRA. Document is now declassified.

³³ Busboom, 23.

³⁴ Hambleton interview, 77.

³⁵ Hambleton interview, 77.

³⁶ Francis, David G., and David R. Nelson. Search and Rescue in Southeast Asia (1 April 1972-30 June 1973). CHECO Report. 27 November 1974, K717.0414-1, pg 39, in USAF Collection, AFHRA. Document is now declassified.

³⁷ Congressional Medal of Honor Society. <http://www.cmohs.org/recipient-detail/3374/norris-thomas-r.php> Accessed 27 Feb 14.

Post rescue life

Colonel Hambleton did not return to flying after his rescue. He recovered at Clark Air Base Hospital in the Philippines from his dehydration, malnutrition, broken arm, back wound, leg wound, and various flak injuries and cuts.³⁸ After recovery, he gave several speeches about his experience to those in theater and then returned home to the United States and to his wife Gwen.³⁹ He retired shortly thereafter in Arizona, and after retirement, Colonel Hambleton continued to give speeches about his experience to various groups across the country.⁴⁰ He passed away from cancer in Tucson, Arizona, on 19 September 2004 at the age of 85.⁴¹

Impact

Colonel Hambleton did not feel that he was the subject of such an extended effort due to his rank, but he did acknowledge that his access to sensitive information from his time in strategic targeting for missiles and long-range bombers may have influenced events.⁴² The loss of that Strategic Air Command information could have been detrimental to the United States had Colonel Hambleton been taken prisoner and interrogated in Hanoi, especially with the potential for Soviet or Chinese interrogators or observers. That type of loss could have also had political consequences for national leadership.⁴³

The rescue of Bat 21B was the biggest and most controversial rescue of the Vietnam War. It put at risk hundreds of personnel from all services, including the Coast Guard and elite Special Forces units, and over 800 sorties were flown in support of the rescue.⁴⁴ Eleven men lost their lives over the course of the 11 ½ day event, with countless others wounded and two becoming prisoners of war.⁴⁵ Eight aircraft were destroyed, and four were seriously damaged.⁴⁶ Even the 'safety circle' that rescue leaders imposed around Colonel Hambleton affected the ongoing ground campaign

³⁸ Busboom, 26.

³⁹ Hambleton interview, 86.

⁴⁰ Hambleton interview, 86.

⁴¹ Hambleton obituary. <http://articles.latimes.com/2004/sep/27/local/me-hambleton27> Accessed 26 Feb 14.

⁴² Hambleton interview, 81, 83.

⁴³ Hambleton interview, 83.

⁴⁴ Busboom, 29.

⁴⁵ Busboom, 28.

⁴⁶ Busboom, 29.

against the NVA invasion, although the South Vietnamese Army (ARVN) was destined to be overrun by the larger invasion force.⁴⁷ Although Air Rescue and Recovery Service leaders vowed ‘never again’ to use such extensive resources to rescue one downed airman, they seemed unable to stick to that a mere two months later when Oyster 01B suddenly came up on the survival radio.⁴⁸

Case 2—Oyster 01B

“I had to decide whether we should risk the loss of maybe a dozen airplanes and crews just to get one man out. Finally I said to myself, ‘Goddamn it, the one thing that keeps our boys motivated is the certain belief that if they go down, we will do absolutely everything we can to get them out. If that is ever in doubt, morale would tumble.’ That was my major consideration. So I took it on myself. I didn’t ask anybody for permission. I just said, “Go do it!””⁴⁹

General John W. Vogt, Seventh Air Force Commander, 1972

Biographical Information

Captain Roger C. Locher was born on 13 September 1946. After graduating from ROTC at Kansas State University, Captain Locher joined the Air Force in March 1969.⁵⁰ He completed undergraduate navigator training and then headed to Davis Monthan Air Force Base in Arizona for F-4 Phantom II training.⁵¹ After completing training as a F-4 Weapon Systems Officer and attending Water Survival Training, Global Survival Training, and Jungle Survival Training, he was sent to the famous “Triple Nickel” 555th Tactical Fighter Squadron based out of Udorn, Thailand and flew 411 combat missions over the next 21 months, scoring three MiG kills with his pilot, Major Robert A. Lodge.⁵²

Context

Captain Locher had been in combat for a year and a half when he logged his first MiG kill on 21 February 1972.⁵³ The NVA launched its Easter Offensive in March, and on 8 May 1972, President Nixon ordered the mining of several North Vietnamese ports

⁴⁷ Busboom, 31.

⁴⁸ Busboom, 29.

⁴⁹ Busboom, 30

⁵⁰ Roger Locher, personal email to author, 2014.

⁵¹ Roger Locher, personal email to author, 2014.

⁵² Roger Locher, personal email to author, 2014..

⁵³ United States Air Force Central Command. “‘Legends of Aerospace’ visit ‘The Rock,’” 9 March 2010. Accessed 28 February 2014 at <http://www.afcent.af.mil/news/story.asp?id=123193928>

and massive airstrikes north of the 20th parallel, an undertaking known as Operation Linebacker.⁵⁴ Getting a second MiG kill on the opening day of Operation Linebacker, Captain Locher and Major Lodge, who was also the Wing Tactics Officer, were one of the most experienced crews in Southeast Asia, having more MiG kills than any other crew.⁵⁵

Mission

Triple Nickel squadron was part of the 432d Tactical Reconnaissance Wing, whose mission statement was “Protect the Force, Get the Pictures, and Kill MiGs.”⁵⁶ One of the F-4s main roles in Vietnam was counter-air, specifically MiGCAP—combat air patrol against North Vietnamese MiG fighter aircraft.⁵⁷ On 10 May 1972, the day of the shootdown, Captain Locher’s flight of four F-4s were performing a fighter cover mission for a 32-plane strike force against the Paul Doumer Bridge and the Yen Vien railroad yard near downtown Hanoi.⁵⁸ In an effort to defend these targets, the North Vietnamese fired a large number of SAMs and sent multiple flights of MiGs to intercept the US attackers.⁵⁹

Shootdown

Oyster flight began to deal with the MiGs as they arrived.⁶⁰ Captain Locher and his pilot, Major Lodge, had just killed their third MiG when they were shot by the enemy 30mm cannon fire of a J-6, a Chinese equivalent to a MiG-19, just 60 miles west of Hanoi, north of the Red River and only 5 miles from Yen Bai, a North Vietnamese MiG fighter base.⁶¹ As the aircraft lost power, descended, and began an uncontrolled spin,

⁵⁴ John L. Frisbee, “Valor: A Good Thought To Sleep On--The Rescue of Oyster 01B.” Accessed 28 Feb 14 at <http://www.f-16.net/forum/viewtopic.php?t=12154>

⁵⁵ Steve Ritchie, “Leadership That Inspires Excellence,” from AU-24, *Concepts for Air Force Leadership*, (Maxwell AFB, AL: Air University, 2001), 413.

Ron Steinman, *The Soldiers' Story: Vietnam in Their Own Words* (New York: Barnes & Noble, 2000), 279.

⁵⁶ Roger Locher Eagle Biography (Maxwell AFB, AL: Air University, 1986).

⁵⁷ Office of Air Force History. *The United States Air Force in Southeast Asia 1965-1973*. (US Government Printing Office: Albert F. Simpson Historical Research Center, 1976), Chapter 3. Accessed 28 Feb 14 at <http://www.f4phantom.com/docs/USAF2.pdf>

⁵⁸ Major Robert A. Lodge entry, POW Network database, Accessed 2 March 2014 at <http://www.pownetwork.org/bios/1/1068.htm>

⁵⁹ Major Robert A. Lodge entry, POW Network database, Accessed 2 March 2014 at <http://www.pownetwork.org/bios/1/1068.htm>

⁶⁰ Roger Locher oral history. Accessed 28 Feb 14 at http://f4phantom.com/docs/oyster1b_pt1.mp3 and http://f4phantom.com/docs/oyster1b_pt2.mp3

⁶¹ Stephen Ritchie speech, March 2011. <http://www.youtube.com/watch?v=QvRcP4go-eg>

Captain Locher ejected.⁶² After successfully ejecting, Captain Locher's evader callsign became Oyster 01B but no US aircrews were able to make radio contact with him, nor had anyone seen him eject or under parachute.⁶³ During his subsequent 23 days of evasion in the jungle of Vietnam, Captain Locher moved 12 miles at dusk and dawn living off the land and evading local villagers in an attempt to get to a better potential rescue site south of the Red River.⁶⁴

Rescue

On the morning of 1 June 1972, Captain Locher heard bombing missions and attempted to contact the aircraft on his survival radio.⁶⁵ He made contact by broadcasting, "Any US aircraft, this is Oyster 01B, over."⁶⁶ Capt Stephen Ritchie, who was in Oyster flight the day of Captain Locher's shootdown, recognized his callsign and replied.⁶⁷ A rescue effort began that day but was derailed by MiGs in the area and ended when fuel supplies waned.⁶⁸ One F-4 was even hit by a SAM but made it back to base in Thailand before bailing out.⁶⁹ General John W. Vogt, Jr., the Seventh Air Force Commander who was in charge of all air operations in Southeast Asia, cancelled the next

Francis and Nelson, 40.

Dale E. Stovall oral history, 1975, pg 21. K239.0512-835, in USAF Collection, AFHRA.

Document is unclassified

⁶² Roger Locher oral history. Accessed 28 Feb 14 at http://f4phantom.com/docs/oyster1b_pt1.mp3 and http://f4phantom.com/docs/oyster1b_pt2.mp3

Roger Locher, personal email to author, 2014..

⁶³ John L. Frisbee, "Valor: A Good Thought To Sleep On--The Rescue of Oyster 01B." Accessed 28 Feb 14 at <http://www.f-16.net/forum/viewtopic.php?t=12154>

Francis and Nelson, 40.

⁶⁴ Roger Locher oral history. Accessed 28 Feb 14 at http://f4phantom.com/docs/oyster1b_pt1.mp3 and http://f4phantom.com/docs/oyster1b_pt2.mp3

Francis and Nelson, 40.

John L. Frisbee, "Valor: A Good Thought To Sleep On--The Rescue of Oyster 01B." Accessed 28 Feb 14 at <http://www.f-16.net/forum/viewtopic.php?t=12154>

⁶⁵ History of the 56th Special Operations Wing, Volume II: April, May, June 1972. K-WG-56-HI, Apr-Jun 1972, v2, Document 34, in USAF Collection, AFHRA. Document is now declassified.

Francis and Nelson, 41.

⁶⁶ Roger Locher oral history. Accessed 28 Feb 14 at http://f4phantom.com/docs/oyster1b_pt1.mp3 and http://f4phantom.com/docs/oyster1b_pt2.mp3

⁶⁷ Stephen Ritchie speech, March 2011. <http://www.youtube.com/watch?v=QvRcP4go-eg> Accessed 28 Feb 14.

Steve Ritchie, "Leadership That Inspires Excellence," from AU-24, *Concepts for Air Force Leadership*, (Maxwell AFB, AL: Air University, 2001), 414.

⁶⁸ Dale E. Stovall oral history, 1975, pg 12-13. K239.0512-835, in USAF Collection, AFHRA. Document is unclassified.

⁶⁹ Dale E. Stovall oral history, 1975, pg 11. K239.0512-835, in USAF Collection, AFHRA. Document is unclassified.

day's entire Air Tasking Order of Linebacker missions—over 150 aircraft—and committed them to the search and rescue of Captain Locher.⁷⁰ The mission was deemed high risk and was made an all-volunteer mission.⁷¹

The search and rescue party came back the next day in force with HC-130s, Jolly Green helicopters, and A-1s, protected by F-4 and F-105 fighters, and supported by KC-135 tankers providing gas, and B-52 bombers performing strikes to crater the Yen Bai airfield and keep the 73 MiGs there on the ground.⁷² Despite facing heavy ground fire, Captain Dale E. Stovall piloted his Jolly Green helicopter into position over Captain Locher and picked him up by lowering the jungle penetrator.⁷³ During infiltration and exfiltration, the rescue force squared off with a MiG, blew up a 14-car train full of enemy gun positions, and faced enemy fire from several villages and trucks.⁷⁴

Upon return to Udorn, Captain Locher, Captain Stovall, and the rescue force were greeted by General Vogt, who had flown up from Saigon to meet them, and over 4,000 people who had come out to welcome Captain Locher back.⁷⁵ Captain Locher's 23-day evasion was the longest successful evasion of the Vietnam conflict, and the 119 aircraft participating in his rescue executed the deepest recovery into North Vietnam of the entire war.⁷⁶ Despite being 350 miles past the Demilitarized Zone (DMZ), not a single rescue

⁷⁰ United States Air Force Central Command. "'Legends of Aerospace' visit 'The Rock,'" 9 March 2010. Accessed 28 February 2014 at <http://www.afcent.af.mil/news/story.asp?id=123193928>
Dale E. Stovall oral history, 1975, pg 30 . K239.0512-835, in USAF Collection, AFHRA.

Document is unclassified

⁷¹ Dale E. Stovall oral history, 1975, pg 14 . K239.0512-835, in USAF Collection, AFHRA.
Document is unclassified

⁷² Major Robert A. Lodge entry, POW Network database, Accessed 2 March 2014 at <http://www.pownetwork.org/bios/1/1068.htm>

Francis and Nelson, 41.

Dale E. Stovall oral history, 1975, pg 15 . K239.0512-835, in USAF Collection, AFHRA.
Document is unclassified

⁷³ Dale E. Stovall oral history, 1975, pg 23. K239.0512-835, in USAF Collection, AFHRA.
Document is unclassified

⁷⁴ History of the 56th Special Operations Wing, Volume I: April, May, June 1972. K-WG-56-HI, Apr-Jun 1972, v1, pg 126, in USAF Collection, AFHRA. Document is now declassified.

Dale E. Stovall oral history, 1975, pg 23. K239.0512-835, in USAF Collection, AFHRA.
Document is unclassified

⁷⁵ Dale E. Stovall oral history, 1975, pg 26 . K239.0512-835, in USAF Collection, AFHRA.
Document is unclassified

⁷⁶ United States Air Force Central Command. "'Legends of Aerospace' visit 'The Rock,'" 9 March 2010. Accessed 28 February 2014 at <http://www.afcent.af.mil/news/story.asp?id=123193928>

force aircraft was lost on rescue day.⁷⁷ The remains of Captain Locher's pilot, Major Lodge, were repatriated in 1977.⁷⁸

Post rescue life

Upon returning to the United States, Captain Locher attended pilot training and went back through F-4 training at Davis Monthan--this time in the front seat.⁷⁹ He flew the F-4 in units based in New Mexico, Alaska, and Florida before training on the F-16, serving as both an instructor and a flight commander.⁸⁰ He went on to play a key role in the early development of the Lockheed F-117 Nighthawk stealth fighter and served as a Vice Wing Commander and Vice Commander of the Air Force Operational Test and Evaluation Center.⁸¹ He retired as a colonel after a full 30-year career in 1999.⁸²

Impact

Two different morale issues came into play regarding Captain Locher's rescue effort. First, Captain Locher was well-liked in his unit, and the rescue forces' morale was down after the first day's rescue attempt was unsuccessful.⁸³ The fact that Captain Locher was such an admired and respected member made it that much tougher to accept that the enemy now knew where he was because of the rescue effort and that he was probably doomed to be captured if the rescue task force could not recover him soon.⁸⁴ Second, General Vogt's statement at the opening of Case Study 2 summarizes the other morale factor, namely that he wanted fliers to know that not only did he plan to "stop the war" for Roger Locher, but that he would do the same for them if they ended up on the ground in enemy territory.⁸⁵ He was concerned that the fliers would be distracted from

⁷⁷ John L. Frisbee, "Valor: A Good Thought To Sleep On--The Rescue of Oyster 01B." Accessed 28 Feb 14 at <http://www.f-16.net/forum/viewtopic.php?t=12154>

⁷⁸ Major Robert A. Lodge entry, POW Network database, Accessed 2 March 2014 at <http://www.pownetwork.org/bios/1/1068.htm> .

⁷⁹ Roger Locher, personal email to author, 2014.

⁸⁰ Roger Locher, personal email to author, 2014.

⁸¹ Roger Locher, personal email to author, 2014.

Robert F. Dorr, *Chopper: Firsthand Accounts of Helicopter Warfare, World War II to Iraq* (New York: Berkley Books, 2005)

⁸² Roger Locher, personal email to author, 2014..

⁸³ United States Air Force Central Command. "'Legends of Aerospace' visit 'The Rock,'" 9 March 2010. Accessed 28 February 2014 at <http://www.afcent.af.mil/news/story.asp?id=123193928>

⁸⁴ United States Air Force Central Command. "'Legends of Aerospace' visit 'The Rock,'" 9 March 2010. Accessed 28 February 2014 at <http://www.afcent.af.mil/news/story.asp?id=123193928>

⁸⁵ Dale E. Stovall oral history, 1975, pg 30. K239.0512-835, in USAF Collection, AFHRA. Document is unclassified.

their missions by worry over the risk of flying deep into North Vietnam and being shot down--that rescue would not be attempted due to its perceived difficulty.⁸⁶

On a professional level, the rescue of Captain Locher had a good return on investment as he went on to many years of continued service as an F-4 and F-16 pilot, as well as his work on the development of the F-117 stealth fighter. On a tactical level, the most controversial aspect of Captain Locher's rescue was General Vogt's decision to cancel an entire day's strikes on Hanoi during the first month of Operation Linebacker.⁸⁷ Essentially, there were more aircraft in the rescue task force than there were on the original strike force the day Captain Locher got shot down, and the potential gains from the planned strikes were foregone for the sake of the rescue.⁸⁸ Finally, on a strategic level, Captain Locher's rescue received major media coverage.⁸⁹ Fortunately, Captain Locher's rescue allowed the story to have a positive spin in an era of negative Vietnam conflict coverage, and it enhanced mission accomplishment as other pilots now believed they too would be rescued if shot down.

Case 3—Mutt 41

Officers interviewed after the war describe confusion in deciding whether to try to rescue Andrews. A senior officer later said he authorized the attempt, while rescue experts at a lower level counseled against it. Against this advice, a decision was made to launch an Army Black Hawk.

Robert Dorr

Biographical Information

Captain William F. Andrews was born on 13 September 1958 and grew up watching the space race on television.⁹⁰ He knew from a young age that he wanted to be involved in space exploration, and he found that the best way to get into the space

⁸⁶ John L. Frisbee, "Valor: A Good Thought To Sleep On--The Rescue of Oyster 01B." Accessed 28 Feb 14 at <http://www.f-16.net/forum/viewtopic.php?t=12154>
Busboom, 30.

⁸⁷ United States Air Force Central Command. "'Legends of Aerospace' visit 'The Rock,'" 9 March 2010. Accessed 28 February 2014 at <http://www.afcent.af.mil/news/story.asp?id=123193928>

⁸⁸ Major Robert A. Lodge entry, POW Network database, Accessed 2 March 2014 at <http://www.pownetwork.org/bios/1/1068.htm>

⁸⁹ Roger Locher, personal email to author, 2014.

⁹⁰ William F. Andrews Air Force Cross citation. Accessed 22 Feb 2014 at <http://projects.militarytimes.com/citations-medals-awards/recipient.php?recipientid=3547>

William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 1.

program was to be an Air Force pilot.⁹¹ He paid for private flying lessons with a paper route before heading to the Air Force Academy, graduating in 1980.⁹² After graduation, he headed to pilot training in Mississippi and then a first assignment as an instructor pilot.⁹³ After that instructor tour, he proceeded to Idaho for his first operational assignment in the EF-111 before being selected to switch to the F-16.⁹⁴ His first operational assignment in the F-16 was to the 10th Tactical Fighter Squadron at Hahn Air Base, Germany, in 1989.⁹⁵

Context

On 2 August 1990, Saddam Hussein ordered his troops to invade Kuwait, forcing the United States military to switch its focus from Europe to the Middle East.⁹⁶ Iraq was condemned on the world stage and the United Nations ordered Iraq to withdraw no later than 15 January 1991 or face military action.⁹⁷ In Operation DESERT SHIELD, the United States rapidly built up forces in the deserts of Saudi Arabia and the waters of the Persian Gulf in anticipation of the deadline. Iraq did not withdraw, and the United States kicked off an aerial attack campaign dubbed DESERT STORM on 17 January 1991.⁹⁸ After nearly six weeks of air attacks, a brief ground campaign ensued beginning on 24 February and ending on 28 February 1991 when a cease fire was declared.⁹⁹

Mission

The 10th Fighter Squadron deployed on New Years' Eve, 1990, to Al Dhafra, a base in the United Arab Emirates.¹⁰⁰ The squadron then had two weeks during the latter stages of Operation Desert Shield to prepare themselves before Desert Storm kicked off

⁹¹ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 1.

⁹² William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 2.

⁹³ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 3.

⁹⁴ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 3.

⁹⁵ William F. Andrews Air Force Cross citation. Accessed 22 Feb 2014 at

<http://projects.militarytimes.com/citations-medals-awards/recipient.php?recipientid=3547>

William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 4.

⁹⁶ Peter Grier, "Call From The Desert," (Air Force Magazine, February 2011), 82-86.

⁹⁷ <http://militaryhistory.about.com/od/battleswars1900s/tp/The-Gulf-War.htm> Accessed 22 Mar 14.

⁹⁸ <http://militaryhistory.about.com/od/battleswars1900s/tp/The-Gulf-War.htm> Accessed 22 Mar 14.

⁹⁹ <http://militaryhistory.about.com/od/battleswars1900s/tp/The-Gulf-War.htm> Accessed 22 Mar 14.

¹⁰⁰ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 4.
Peter Grier, "Call From The Desert," (Air Force Magazine, February 2011), 82-86.

to begin the counter-attack on Iraqi forces.¹⁰¹ The primary role of F-16s in Desert Storm was to drop bombs, with a normal combat load of two to four 2,000 lb bombs for destroying enemy ground targets.¹⁰² The F-16s would dive from 25-30,000 feet down to 10-15,000 feet, drop their bombs, and climb back up, taking out targets such as communications facilities, enemy-held airfields, SCUD missiles, and enemy equipment concentrations in preparation for the ground invasion that would follow the air campaign.¹⁰³ After the ground invasion began, F-16s occasionally ended up doing close air support for ground forces in contact with the enemy, in addition to normal bombing missions.

Shootdown

Captain Andrews was shot down 30 miles northwest of Basra, Iraq, on 27 February 1991¹⁰⁴. On the day of the shootdown, Captain Andrews was leading a flight of F-16s against heavily defended armor and mechanized forces when a Republican Guard infrared-guided surface-to-air missile blew apart his aircraft, forcing him to eject.¹⁰⁵ During his five-minute parachute descent, with enemy ground troops already shooting at him, he pulled out his radio and provided direction to his flight.¹⁰⁶ Despite breaking his leg during landing and being fired on by enemy ground troops, he continued to make radio calls to his flight and to an OA-10 overhead to protect them from surface to air missile launches.¹⁰⁷ The enemy troops who were firing at him during his parachute descent captured him immediately after his courageous radio call, leaving no opportunity for evasion or further radio contact.¹⁰⁸

Rescue

¹⁰¹ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 4.

¹⁰² William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 5.

¹⁰³ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 5-6.

¹⁰⁴ William F. Andrews Air Force Cross citation. Accessed 22 Feb 2014 at <http://projects.militarytimes.com/citations-medals-awards/recipient.php?recipientid=3547>

¹⁰⁵ William F. Andrews Air Force Cross citation. Accessed 22 Feb 2014 at <http://projects.militarytimes.com/citations-medals-awards/recipient.php?recipientid=3547>

William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 9.

¹⁰⁶ William F. Andrews Air Force Cross citation. Accessed 22 Feb 2014 at <http://projects.militarytimes.com/citations-medals-awards/recipient.php?recipientid=3547>

William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 9.

¹⁰⁷ William F. Andrews Air Force Cross citation. Accessed 22 Feb 2014 at <http://projects.militarytimes.com/citations-medals-awards/recipient.php?recipientid=3547>

¹⁰⁸ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 9.

Despite Captain Andrews' prompt radio contact with his flight, they were unable to locate him due to low clouds, smoke from oil well fires, and the surface-to-air missiles being fired at them.¹⁰⁹ American fighter pilots in the area warned that a rescue was not advisable, but senior leaders launched a mission nevertheless.¹¹⁰ An Army UH-60 helicopter, callsign Bengal 15, was sent in with its four-person crew, a three-person 101st Airborne Division pathfinder team, and an Army flight surgeon on board to attempt a rescue, escorted by two AH-64 Apache helicopter gunships.¹¹¹ Upon entering the area, the UH-60 was downed by Iraqi anti-aircraft fire. Two pilots, one crew chief, and two pathfinders died, and the three injured survivors—crew chief Staff Sergeant Daniel Stamaris, pathfinder Sergeant Troy Dunlap, and flight surgeon Major Rhonda Cornum--were captured by Iraqi forces.¹¹²

Because the Apache helicopters retreated from the anti-aircraft fire and reported no survivors of the Blackhawk crash, all eight members onboard the helicopter were listed as killed in action and no rescue mission was initiated for them.¹¹³ Captain Andrews and the surviving members of his would-be rescue team were instead transported to Iraqi jails where they were interrogated and abused for eight days.¹¹⁴ Eventually Major Cornum, Captain Andrews, Sergeant Dunlap, and Sergeant Stamaris were repatriated through the Red Cross as a result of post-surrender negotiations with Iraq on 6 March 1991.¹¹⁵

Post rescue life

For his actions to protect his flight from missiles while surrounded by enemy on the ground, Captain Andrews received the Air Force Cross, only one of two airmen to receive this honor during Operation Desert Storm.¹¹⁶ After surgery to repair his broken

¹⁰⁹ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 9.

¹¹⁰ <http://www.defensemmedianetwork.com/stories/desert-storm-black-hawk-incident-was-a-mix-of-heroism-tragedy/> Accessed 22 Mar 14.

¹¹¹ http://www.military.com/Content/MoreContent?file=dunlap_01 Accessed 22 Mar 14.

¹¹² Peter Grier, "Call From The Desert," (Air Force Magazine, February 2011), 82-86.

http://www.military.com/Content/MoreContent?file=dunlap_01 Accessed 22 Mar 14.

http://money.cnn.com/magazines/moneymag/moneymag_archive/1991/05/01/86516/index.htm

¹¹³ http://www.military.com/Content/MoreContent?file=dunlap_01 Accessed 22 Mar 14.

¹¹⁴ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 10-11.

¹¹⁵ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 11.

<http://www.pownetwork.org/gulf/dd071.htm> Accessed 22 Mar 14.

¹¹⁶ William F. Andrews Air Force Cross citation. Accessed 22 Feb 2014 at <http://projects.militarytimes.com/citations-medals-awards/recipient.php?recipientid=3547>

leg and four months of recuperation, Captain Andrews returned to flight status and became an instructor at the F-16 schoolhouse in Phoenix, Arizona.¹¹⁷ He had several staff tours and operational F-16 tours, including tours as a squadron and group commander.¹¹⁸ Captain Andrews returned to Iraq to fly missions enforcing the no-fly zones in 2001-2002, and subsequently served on the Joint Staff.¹¹⁹ He retired as a colonel in 2010 and currently works at the National Defense University teaching military history and political science, including a class on the psychology of battle.¹²⁰

Impact

This recovery attempt is different from the previous two case studies in that the rescue attempt was a failure. The rescue community knows that time is a precious commodity in a rescue situation, but in Captain Andrews' case, time was irrelevant.¹²¹ The enemy had him surrounded before he even landed from his parachute ride, and a lack of accurate intelligence led to the ill-fated decision to launch a Blackhawk full of rescue personnel to retrieve him.¹²² Instead of removing one person from hostile control, the mission added three more persons into hostile control and cost five members' lives.

There were no obvious political or strategic impacts specific to Captain Andrews' captivity, but there were societal impacts of Major Cornum's captivity. Major Cornum was seriously injured in the helicopter crash and sexually molested while in Iraqi control, which sparked extensive media discussions about the appropriateness of combat participation for United States women.¹²³ Despite the societal uproar at the time, the long-term impact has been minimal as women have been cleared for increased levels of combat participation in the years since Major Cornum's captivity.¹²⁴

¹¹⁷ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 12.

¹¹⁸ <http://www.andrews1.com/curriculum-vitae> Accessed 17 Mar 14.

William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 12.

¹¹⁹ Peter Grier, "Call From The Desert," (Air Force Magazine, February 2011), 82-86.

¹²⁰ <http://www.andrews1.com/curriculum-vitae> Accessed 17 Mar 14.

William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 12.

Peter Grier, "Call From The Desert," (Air Force Magazine, February 2011), 82-86.

¹²¹ United States Air Force *Personnel Recovery Core Function Concept 2013*, 13.

¹²² William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 9.

William F. Andrews Air Force Cross citation. Accessed 22 Feb 2014 at <http://projects.militarytimes.com/citations-medals-awards/recipient.php?recipientid=3547>

¹²³ <http://content.time.com/time/nation/article/0,8599,438760,00.html> Accessed 22 Mar 14.

¹²⁴ <http://www.cnn.com/2013/06/18/politics/women-combat/> Accessed 22 Mar 14.

The tactical impacts included the loss of five highly trained military members, an F-16, and a UH-60, but these tactical losses had little effect on the overall success of the Gulf War Campaign to remove Iraqi forces from Kuwait and secure Iraq's surrender. The personal impact to the comrades and families of those lost cannot be quantified but counts nonetheless, as does the personal impact for Captain Andrews' wife and small children who received their husband and father back. Obviously there were also personal impacts to Captain Andrews as a result of his maltreatment in enemy hands, but he was able to overcome the psychological effects and continue to fly and command in combat.¹²⁵ The professional impact of his post-rescue contribution is also notable--he flew an F-16 in both Operation Southern Watch and Operation Enduring Freedom, successfully dodging surface-to-air missiles and dropping GPS-guided munitions on the enemy.¹²⁶ In 2004, his desire to share his expertise with the next generation of Air Force leaders led him to a teaching position at the National Defense University, where he continues to shape officers as a civilian professor after his military retirement in 2010.¹²⁷

Summary

In this chapter, three case studies illustrated rescue events where life, material, and battlefield initiative were put at risk for the potential return of an isolated member. The case studies allowed an examination of the tactical, strategic, political, and personal impacts of rescue operations such as the loss of rescue crews and aircraft, cancellation of entire days of operations against the enemy, and the post-rescue contributions of the isolated members to the security of the United States. The following chapter will expand upon these impacts, examine them as they relate to the cultural imperative to rescue isolated members, and propose a range of options for the future of rescue.

¹²⁵ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 13.

¹²⁶ William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 14.

¹²⁷ <http://www.andrews1.com/curriculum-vitae> Accessed 17 Mar 14.

William F. Andrews Oral History, Interview by Philip Wilkerson, 15 March 2008, 16.

Chapter 4

Analysis and Options

Theories have four stages of acceptance:

1. *This is worthless nonsense;*
2. *This is interesting, but perverse;*
3. *This is true, but quite unimportant;*
4. *I always said so.*

J. B. S Haldane

If at first an idea does not sound absurd, then there is no hope for it.

Albert Einstein

One should bear in mind that there is nothing more difficult to execute, nor more dubious of success than to introduce a new system of things. For he who introduces it has all those who profit from the old system as his enemies, and he has only lukewarm allies in all those who might profit from the new system.

Machiavelli, "The Prince"

This chapter describes why the personnel recovery field should be looking at alternatives for the future and analyzes five potential options for the future of personnel recovery within the United States military.

The Need for Options

Is the United States hanging on to PR as a core function due to cultural tradition and emotion, even when the cost benefit analysis comes up against the effort, and can it continue to do that in today's fiscal environment? According to General Mark A. Welsh III, the current Chief of Staff of the Air Force (CSAF), the US Air Force must cut \$20 billion from its budget by the time sequestration returns in 2016.¹ "Trimming around the edges wouldn't be enough to reduce the budget by the billions of dollars required by

¹ General Mark A. Welsh III, speech on 3 Apr 2014, Maxwell AFB. AL.

sequestration and other budget reductions,” he said.² “So, we looked at cutting fleets of aircraft as a way to create the significant savings required.”³ Cutting the A-10 fleet is only saving \$4 billion, so the other \$16 billion has to be cut from other places.⁴ Perhaps rescue should be one of those ‘other places’ under consideration.

Options

General Welsh is on a mission to encourage service-wide innovation. The CSAF frequently has innovation as one of his talking points, and in January 2013, he released a new vision document for the US Air Force after noting that the Air Force was struggling to keep up with the pace and size of commercial sector changes. Additionally, the Vice CSAF, General Larry O. Spencer, led an “Every Dollar Count\$” initiative in 2013 to solicit “good and innovative ideas on how we can better leverage the existing dollars we have and ultimately fly, fight and win.”⁵ It is obvious that the Air Force is looking forward, seeking the same or better capability while spending fewer dollars.

But the reality is that fewer dollars will most likely lead to fewer capabilities unless innovative arrangements can be made. General Welsh states that “we’re going to be doing less *everything*” in the face of looming budget cuts, and “we have to be the Air Force we can be, not the Air Force we wish we were.”⁶ “Every major decision reflected in our [fiscal year 2015] budget proposal hurts,” Welsh said.⁷ “Each of them reduces capability that our combatant commanders would love to have and believe they need. There are no more easy cuts.”⁸ Since there is a perceived cultural imperative shared by members of the military, civilians, foreign governments, and enemy leaders alike that the United States will pursue rescue of its isolated persons, the military must consider pursuing this mission in less expensive ways. In light of these cultural and fiscal facts, five possible options for the future of personnel recovery in the United States military are presented and analyzed below:

² <http://www.defense.gov/news/newsarticle.aspx?id=121843> Accessed on 6 Apr 14.

³ <http://www.defense.gov/news/newsarticle.aspx?id=121843> Accessed on 6 Apr 14.

⁴ General Mark A. Welsh III, speech on 3 Apr 2014, Maxwell AFB. AL.

⁵ <http://airforcelive.dodlive.mil/2013/05/every-dollar-counts-initiative-update/> (accessed January 29, 2014).

⁶ General Mark A. Welsh III, speech on 3 Apr 2014, Maxwell AFB. AL.

⁷ <http://www.defense.gov/news/newsarticle.aspx?id=121843> Accessed on 6 Apr 14.

⁸ <http://www.defense.gov/news/newsarticle.aspx?id=121843> Accessed on 6 Apr 14.

1. Redesignate and redistribute dedicated PR assets to US Special Operations Command (SOCOM)

In April 2009, Secretary of Defense Robert Gates asked in a defense budget recommendation statement if the personnel recovery mission “can only be accomplished by yet another single-service solution with single-purpose aircraft.”⁹ He also stated that the Department of Defense would “take a fresh look at the requirement behind this program and develop a more sustainable approach.”¹⁰ Resource Management Decision 802 directed the joint staff to then “re-evaluate combat search and rescue requirements in the context of joint forces’ capabilities.”¹¹ One potential way to accomplish this joint, sustainable, multi-purpose force is to redesignate and redistribute dedicated PR assets to US Special Operations Command (SOCOM).

In today’s strategic environment, “rescue” most often translates into direct action (DA) missions by special operators, not CSAR by dedicated rescue. The focus is typically on DA for high risk rescues, such as the rescues of Vega 31, an F-117 pilot, and Hammer 34, an F-16 pilot, both downed over Serbia in 1999 and rescued by Special Tactics specialists in special operations helicopters.¹² Special operators are also called upon for rescue in situations with uncertain environments and high potential for media coverage, such as the rescues of Kurt Muse from a Panamanian jail in 1989 and Private Jessica Lynch from an Iraqi hospital in 2003.¹³ Special operations forces carried out both of these rescues, and the trend seems to be that future rescue scenarios will likely be either high-risk, high-media potential, or both, and that the terrain of future battlespace may not be favorable evasion landscape--flat open ground offers little concealment and

⁹ US Joint Forces Command, *Assessment of Combat Search and Rescue Requirements in a Joint Context*, Joint Personnel Recovery Agency, 13 August 2009, 1.

¹⁰ US Joint Forces Command, *Assessment of Combat Search and Rescue Requirements in a Joint Context*, Joint Personnel Recovery Agency, 13 August 2009, 1.

¹¹ US Joint Forces Command, *Assessment of Combat Search and Rescue Requirements in a Joint Context*, Joint Personnel Recovery Agency, 13 August 2009, 1.

¹² James L. Cardoso, Vega 31 Mission Flight Lead. Memorandum. To Joint Special Operations Task Force. Subject: After Action Report for CSAR of Vega 31, 5 April 1999.

Stephan J. Laushine, , Rescue Mission Commander. Memorandum. To Commander, Joint Special Operations Task Force. Subject: After Action Report for Hammer 34 Rescue Mission, 2 May 1999

¹³ <http://www.military.com/NewsContent/0,13319,86633,00.html?ESRC=army.nl> Accessed 7 Apr 2014.

Kurt Muse, *Six Minutes To Freedom*, (New York, NY: Kensington Publishing, 2006).

provision for evaders.¹⁴ Contested environments will likely make operating bases further from operating areas, and ‘dirty’ electromagnetic environments will only increase the challenge of communication, navigation, and protection while conducting personnel recovery.¹⁵

Lt Col Lee dePalo, in a 2005 study on combat search and rescue in the war on terror, asserts “There is too much combat power sitting for lengthy periods of time without a viable mission.”¹⁶ Despite not being special operations or Army assets, underutilized Air Force rescue helicopters were, according to some reports, occasionally tasked with special operations or Army-like missions in CENTCOM between October 2001 and June 2009.¹⁷ Although turnover of personnel prevented accurate counts of these missions, auxiliary missions planned or supported by Air Force rescue assets during this period included close air support, armed escort, resupply, extraction, aerial search, and perimeter security.¹⁸ If Air Force rescue assets became exclusively part of special operations, these missions could be trained and executed as part of the mission set rather than opportune or emergency employment.

All Active, Guard, and Reserve dedicated rescue assets would transfer to SOCOM but could feasibly remain in their current active, guard, or reserve status. These assets were put under AFSOC from 2003-2006, but they were only partially shifted.¹⁹ Only the CONUS-based assets were handed over to AFSOC, and it was an administrative control (ADCON)-only agreement. This limited arrangement led to a mediocre result and an eventual shift back to ACC. AFSOC and rescue assets were also previously forced into close relations after the signing of the 1987 Defense Authorization Act, where search and rescue was listed as one of the nine primary missions of the new US Special Operations

¹⁴ Darrel Whitcomb, *Combat Search and Rescue in Desert Storm*, (Maxwell AFB, AL: Air University Press, 2006), 245.

¹⁵ United States Air Force, *Air Force Personnel Recovery Core Function Concept 2013*, 13.

¹⁶ Lee dePalo, *USAF Combat Search and Rescue: Ineffective Utilization In The Global War On Terrorism* (Maxwell AFB, AL: Air University, 2005), 39.

¹⁷ US Joint Forces Command, *Assessment of Combat Search and Rescue Requirements in a Joint Context*, Joint Personnel Recovery Agency, 13 August 2009, 16.

¹⁸ US Joint Forces Command, *Assessment of Combat Search and Rescue Requirements in a Joint Context*, Joint Personnel Recovery Agency, 13 August 2009, 16.

¹⁹ Personal email from James McElhenney, Executive Director, That Others May Live Foundation. Nov 2013.

Command.²⁰ The special operations and rescue communities were blended to staff the growing fleet of helicopters, but ultimately the Air Staff directed that personnel recovery not be listed on the designed operational capability (DOC) statements of special operations unit.²¹ This step severed the relationship grown from the SOCOM mission list.

In this option, helicopters currently owned by dedicated Air Force rescue would be distributed out to the Army, specifically the 160th Special Operations Aviation Regiment (SOAR) and MEDEVAC units. This option would streamline control and logistics of similar helicopter platforms, since the HH-60 is a highly-modified version of the Army's Black Hawk helicopter.²² Army MEDEVAC is the most employed recovery service for pickups in permissive environments, and the 160th SOAR is the elite aviation unit called upon when higher expertise is required, such as elevated threat, extreme darkness, and higher elevation.²³ The United States does not currently have conventional CSAR assets that can penetrate non-permissive environments, and special operations DA capabilities are often called upon to attempt those missions. If even those capabilities fall short, the special operator-developed Non-conventional Assisted Recovery (NAR) is used in situations that exceed conventional recovery methods.

In this option, the HC-130s and pararescue specialists (PJs) would be transferred to SOCOM, specifically Air Force Special Operations Command (AFSOC). The HC-130s would fit well in an environment with the other special operations C-130s both for mission and logistic requirements. Besides being modified versions of the same basic airframe, both HC-130s and MC-130s execute day and night high and low-level personnel and equipment airdrop, airland transportation, helicopter air-to-air refueling, and forward area refueling point missions.²⁴ The PJs would be absorbed into the AFSOC Special Tactics units and perform similar duties to the PJs already in those units. There is

²⁰ Darrel Whitcomb, *Combat Search and Rescue in Desert Storm*, (Maxwell AFB, AL: Air University Press, 2006), 29.

²¹ Darrel Whitcomb, *Combat Search and Rescue in Desert Storm*, (Maxwell AFB, AL: Air University Press, 2006), 32-33.

²² <http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104508/hh-60g-pave-hawk.aspx> Accessed 10 Apr 14.

²³ US Joint Forces Command, *Assessment of Combat Search and Rescue Requirements in a Joint Context*, Joint Personnel Recovery Agency, 13 August 2009, 13-15.

²⁴ <http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104509/hc-130pn-king.aspx> Accessed 10 Apr 14.

already career field crossflow occurring between the AFSOC and Air Combat Command (ACC) PJ units, so this would not be a culture clash. Supporting assets such as fixed wing refuelers (KC-10, KC-135) and surveillance assets (MQ-1, MQ-9, etc.), which support a wide range of missions other than personnel recovery, would remain in their current commands.

As fiscal situation and physical space permits, rescue assets should relocate to nearby bases with similar special operations equipment and missions. For example, the HC-130s at Moody Air Force Base could relocate to Hurlburt Field or Eglin Air Force Base to take advantage of similar C-130 maintenance facilities, streamlined logistics, and excellent training areas. It would also help to quickly assimilate the rescue culture into the special operations culture and vice versa. The downside of such a move is obviously the tremendous cost, and if cost is prohibitive, the units could stay where they are and still execute the mission, even if somewhat less synergistically.

The rescue mission would be rolled into the special operations mission set. Missions could be executed like tactical recovery of aircraft and personnel (TRAP) conducted by the Marine Corps, which executed the 1995 recovery of Basher 52, F-16 pilot Captain Scott O-Grady, in Bosnia, and the 2011 recovery of Bolar 34A, an F-15E pilot who ejected over Libya.²⁵ The mission is performed “by an assigned and briefed aircrew for the specific purpose of the recovery of personnel, equipment, and/or aircraft when...survivors and their location have been confirmed” and other nearby assets cannot perform an expedient pickup.²⁶ Having the rescue mission under special operations would also allow for an increase in skilled PR instructors in the 6th Special Operations Squadron, the only Aviation Foreign Internal Defense (AvFID) squadron in the Air Force. When building partner capacity, medical evacuation (MEDEVAC) and search and rescue (SAR) are high payoff capabilities for legitimizing a government, and the AvFID mission would benefit from an influx of these skills in its talent pool.²⁷

²⁵ <https://www.mca-marines.org/leatherneck/rescue-basher-52> Accessed 22 Apr 14.
<http://www.airforcemag.com/MagazineArchive/Documents/2013/March%202013/0313eagle.pdf>
Accessed 25 Apr 14.

²⁶ JP 1-02, (Washington, DC: Chairman of the Joint Chiefs of Staff, 2010, Amended through 15 Dec 2013), 259.

²⁷ US Air Force. Irregular Warfare Tiger Team Final Report, 22 May 2009, 5.

One conceivable danger in moving a capability from a dedicated unit to a multi-mission unit is the potential for hard-won skills to atrophy. There is a possibility that letting the military's focus on personnel recovery blend into other mission sets may lead to having to regenerate the capability later, much like the United States went through with its atrophy and regeneration of human intelligence networks and capabilities. There could be second and third order effects or unintended consequences in the future due to the time and resources that would be necessary to reconstitute an atrophied mission area. However, the big take-away from the blend would be that the capabilities and assets of the rescue community would be put to broader use inside the mission set of special operations, and the utilization efficiency would be increased to support an increased demand for special operations and a decreasing Air Force budget.

2. Guard and Reserve PR

Currently 50% of the total force PR assets are Guard and Reserve, and this option would move the remaining 50% of PR assets to the Guard and Reserve.²⁸ The National Commission on the Structure of the Air Force report, released in January 2014, finds the following truths to be foundational:

- Past and current Air Force leaders have committed the resources and effort needed to allow the Reserve Components (RC) to maintain the same standards of skill and operational readiness as the Active Component (AC).
- “Part-time” force structure—that capability delivered by traditional Reservists and Guardsmen who do not serve continuously on active duty—costs less than the force structure provided by “full-time” personnel.
- Recognizing that some missions must be performed by the Active Component, the Air Force can, and should, entrust as many missions as possible to its Reserve Component forces.
- Transitioning missions from the Active Component to the Reserve Components will allow the Air Force to perform these missions with less expensive part-time Reservists while reducing the Active Component end strength, thus saving money in the military personnel accounts that can be put to use in readiness, modernization, and recapitalization

²⁸ <http://afcommission.whs.mil/public/docs/NCSAF%20WEB220.pdf> Accessed 13 Apr 14. Page 100.

accounts. In this way, all components of the force will remain more ready and mission capable, and the Air Force will retain the capacity to surge its forces when needed.²⁹

Lieutenant General Stenner, Air Force Reserve Commander from 2008-2012, liked to remind people that the Air Force Reserve provides 17% of the Air Force's fighting force for only 4% of the Air Force budget.³⁰ He advertised the reserve as an outstanding way to give the taxpayers maximum return on their tax dollar investment.³¹ He noted that reservists are paid when they are needed and returned to civilian jobs when they are not, providing savings in personnel costs such as pay, benefits, and infrastructure.³² Lastly, he often emphasized that the reserve maximized the continued service of highly-trained, highly-skilled professionals.³³

However, the National Commission concluded that simply measuring the payroll cost of an individual service member is inadequate. "Life-cycle" or "fully burdened" cost must also be considered. For example, "the Air Force must perform certain functions, such as procurement and RDT&E (Research, Development, Test, and Evaluation), that support all components of the Air Force. Those costs must be accounted for but are not easily allocated to any one component."³⁴ Also, the way in which the nation intends to employ full- and part-time Air Reserve Component personnel, to include the costs of mobilization, will affect the comparative cost of a given force mix.³⁵

Even with life-cycle costs included, the reserve is still a cost-effective method of maintaining a skilled, professional force. If the United States desires to maintain a separate "waiting force" dedicated to personnel recovery, perhaps the answer is to make a lower cost force by assigning the PR mission to the reserves which can be called up when needed. This can lower costs but may lead to the equipment not reaching its maximum

²⁹ <http://afcommission.whs.mil/public/docs/NCSAF%20WEB220.pdf> Accessed 13 Apr 14. Page 7-8.

³⁰ <http://ngrcc-hunter.house.gov/sites/nationalguardcaucus.house.gov/files/United%20States%20Air%20Force%20Reserve%20Modernization%202011.pdf> Accessed 13 Apr 14. Foreword.

³¹ Lt Gen Stenner speech, 2011, Duke Field, FL.

³² <http://ngrcc-hunter.house.gov/sites/nationalguardcaucus.house.gov/files/United%20States%20Air%20Force%20Reserve%20Modernization%202011.pdf> Accessed 13 Apr 14. Foreword.

³³ Lt Gen Stenner speech, 2011, Duke Field, FL.

³⁴ <http://afcommission.whs.mil/public/docs/NCSAF%20WEB220.pdf> Accessed 13 Apr 14. Page 25.

³⁵ <http://afcommission.whs.mil/public/docs/NCSAF%20WEB220.pdf> Accessed 13 Apr 14. Page 25

utilization rate and leaves unanswered the question of how to recapitalize a potentially underutilized fleet when the current assets reach the end of their life cycle.

3. Contract PR--Blackwater style

The United Kingdom has contracted out its military and Coast Guard personnel recovery services to a private American company, the Bristow Group, which also operates in the Netherlands, Norway, Trinidad and Tobago, Australia, Russia, Brazil, and Canada.³⁶ The reason for the switch, cites the United Kingdom Ministry of Defense, is that it “no longer believes it gains ‘operational advantage’ from military personnel doing search and rescue work in the United Kingdom.”³⁷ Commander Graham Finn, head of Royal Navy search and rescue, states “we’re in a period of redefining the military, not just through defense cuts but redefining what it is we are delivering.”³⁸

The rescue area is not alone in seeing contractors perform duties once carried out by military personnel on military assets. For example, the United States Air Force contracts out a portion of its spacelift requirement to civilian space companies like SpaceX and Orbital Sciences.³⁹ These companies fulfill this US Air Force need in addition to their regular commercial business, and they are not alone in working for the military. The US military also contracted out much of its high-end personnel security work to the Blackwater company established by Erik Prince in 1997.⁴⁰ Blackwater has performed expedient rescue missions as the situations have presented themselves, such as one 2006 mission in which two Blackwater helicopters were returning from a security mission and stopped to rescue five Army soldiers whose convoy had just been hit by an explosive penetration device.⁴¹

The bottom line in this fiscally-constrained environment is whether or not this option is a cost savings. If it is not, this option is likely dead on arrival. There would be no motivation to scrap a viable military rescue force to replace it with a civilian force

³⁶ <http://rt.com/news/us-contractor-uk-helicopter-rescue-ops-857/> Accessed 9 Apr 14.

<http://bbc.com/news/uk-21934077?print=true> Accessed 15 Apr 14.

³⁷ <http://www.theguardian.com/politics/2013/jan/31/search-rescue-helicopters-privatisation-fears> Accessed 15 Apr 14.

³⁸ <http://www.theguardian.com/politics/2013/jan/31/search-rescue-helicopters-privatisation-fears> Accessed 15 Apr 14.

³⁹ <http://www.spacex.com/missions> Accessed 19 Feb 14.
<http://www.orbital.com/HumanSpaceExplorationSystems/COTS/> Accessed 19 Feb 14.

⁴⁰ Erik Prince, *Civilian Warriors* (New York, NY: Penguin Group, 2013).

⁴¹ Erik Prince, *Civilian Warriors* (New York, NY: Penguin Group, 2013), 260.

unless the military force was repurposed similar to Option 1 to meet an operational need or retired with a high degree of operational cost savings. In order to be feasible, the money then spent on the civilian contract must be less than the cost savings of retiring the current fleet or meeting the operational need with other equipment.

The idea of hiring out personnel recovery services raises some interesting questions. For instance, will the cost structure have any link to how many rescues are performed? Could the company lobby to support United States involvement in dangerous operations in order to increase its earning potential? Could a foreign company win the contract and perform poorly to damage the reputation of the United States? If the United States entrusts the rescue of its precious citizens to a private company, it must be US-owned to ensure a productive relationship and eliminate some of the motivation questions.

Another reason that a private rescue contractor must be US-owned is to avoid being classified a mercenary according to Additional Protocol I to Article 47 of the Geneva Convention. This protocol classifies a mercenary as someone who takes part in an armed conflict for private gain, not as a member of the armed forces, who is “neither a national of a party to the conflict nor a resident of a territory controlled by a party to the conflict.”⁴² There is a potential for rescue forces to have to engage the enemy to defend themselves and the isolated person they came for when participating in a rescue, and if the private rescue contractor is American, sent by the United States, it reduces the danger of being labeled a mercenary.

Another interesting question regards the risk management of civilian contractors. Is the US public more tolerant of losing contractors than uniformed military members? Is there a perception that military members’ lives are somehow more valuable because they wear a uniform, or is it the citizenship that matters? The answer would have to be ‘it depends,’ but there have been cases of public outrage over deaths in both categories. The Fallujah bridge incident in Iraq, where four Blackwater contractors were murdered, mutilated, and hung from a bridge, evoked emotional public outcry, as did the Blackhawk Down aftermath where Army Staff Sergeant William Cleveland was killed and dragged

⁴² Christopher Kinsey, *Corporate Soldiers and International Security*, (New York, NY: Routledge, 2006), 19.

through the streets by crowds in Mogadishu, Somalia.⁴³ If there was a difference in public acceptance between military and civilian casualties, how would this change the risk tolerance for rescue missions?

Another question that must be addressed is whether the contractor can be held liable for failed rescue missions. In 2004, a Presidential Airways CASA 212 working for Blackwater impacted the Hindu Kush mountains during a ferry flight from Bagram to Farah in Afghanistan.⁴⁴ The two pilots were accused of negligence and the families of the three Army soldiers on board sued Blackwater for corporate negligence.⁴⁵ This case was for an airlift mission, but rescue missions are inherently more dangerous. What if a rescue contractor launches to attempt a rescue but does not get there in time? What if a rescue contractor gets to the isolated person before he is captured but cannot retrieve him due to enemy fire or inclement weather? What standard will be applied to determine whether or not a contractor lived up to its rescue contract when the enemy and nature get votes in the matter?

The final interesting question is how much input the contractor would have in determining which rescue missions it accepts. If the government views that it pays for a service and wants to be able to employ it when and where it chooses, can the government send the contractor on a rescue mission regardless of the risk level? Besides the moral weight of sending contractors on a suicide mission, there are tactical reasons that would discourage ultra-high risk missions: more isolated Americans in need of recovery, and one fewer rescue asset with which to recover them. Tactical decision-making aside, can a contractor refuse a government rescue mission, and if so, for what reasons? If the contractor loses assets, it loses profit and profitable equipment, so what is the motivation? What if the government and contractor disagree on the risk assessment? If a contractor does not launch a rescue mission that the government orders, can the contractor be sued for breach of contract or replaced outright? These are tough questions that must be

⁴³<http://www.pbs.org/wgbh/pages/frontline/shows/warriors/contractors/highrisk.html> Accessed 17 Apr 14.

<http://iconicphotos.wordpress.com/2010/03/10/u-s-marine-dragged-through-mogadishu/> Accessed 16 Apr 14.

⁴⁴ Erik Prince, *Civilian Warriors* (New York, NY: Penguin Group, 2013), 241.

⁴⁵ Erik Prince, *Civilian Warriors* (New York, NY: Penguin Group, 2013), 247.

answered if the United States ever considers following in the footsteps of the United Kingdom and contracting its recovery services.

4. Privatized PR--CRAF style

This solution is similar to the Civil Reserve Air Fleet (CRAF) in use by the airlift community, where civil aircraft and crews are contracted annually by civilian companies for use during surge military operations or other national emergencies to transport personnel and cargo.⁴⁶ It is a model that could translate poorly from airlift to rescue as the two have certain key differences, but the idea is worth consideration. Similar arrangements already exist in the sealift community--the Voluntary Intermodal Sealift Agreement (VISA)⁴⁷ and the Maritime Security Program (MSP)⁴⁸ are modeled after CRAF and use commercial shipping companies for surge military operations or national emergencies. Additionally, in papers published by Army professional development schools, a USAF officer proposed SpaceCRAF to augment DOD satellite needs in a national emergency, and an Army officer proposed the Civilian Reserve Intelligence Program (CRIP) to leverage existing commercial intelligence capabilities.⁴⁹ A PRCRAF could pull from the pool of existing civil SAR and Lifelight capabilities, although the communities they serve would have reduced emergency services in order to send them forward to the military operations area. Another key difference between CRAF airlift and PRCRAF is the deployment process. Airlift CRAF missions usually originate in the home country by carrying passengers and cargo to the operations area. PRCRAF helicopter assets would need to be transported by airlift to the operations area before being unpacked and beginning the mission. There would be obvious limits on most PRCRAF helicopters' combat participation due to lack of armor or weapons, unless those can be pre-certified for installation and safely added before military operations. Lastly,

⁴⁶ "Headquarters Air Mobility Command: Command Brief" (Scott AFB, IL, 2012), 32.

⁴⁷ "Voluntary Intermodal Sealift Agreement (VISA)," n.d., http://www.marad.dot.gov/ships_shipping_landing_page/national_security/vol_intermodal_sealift_agreement/vol_intermodal_sealift_agreement.htm. accessed January 29, 2014.

⁴⁸ "Maritime Security Program (MSP)," n.d., http://www.marad.dot.gov/ships_shipping_landing_page/national_security/maritime_security_program/maritime_security_program.htm., accessed January 29, 2014.

⁴⁹ David C Arnold, "SpaceCRAF : A Civil Reserve Air Fleet For Space-Based Capabilities By" (United States Army War College, 2011). A similar paper by David Arnold and Peter Hays was published in the Joint Forces Quarterly, issue 64, 1st quarter 2012 (http://www.ndu.edu/press/lib/pdf/jfq-64/JFQ-64_30-39_Arnold-Hays.pdf). David W Tohn, *Civilian Reserve Intelligence Program : A Fundamental Requirement for Army Intelligence Transformation* (Fort Leavenworth, Kansas, 2003).

FAA rules would be applicable for standard commercial and CRAF flights, including those that prohibit civilian flights to specific locations, but waivers could be obtained if circumstances warranted.⁵⁰

This option, like the contractor option above, raises some interesting cost questions. A 1994 study estimated that if DoD were required to recreate CRAF capability with organic military aircraft, it would have cost \$1-\$3B annually over the previous 30 years.⁵¹ How much could the DoD save if it established a PRCRAF of civilian rescue assets? The easiest way to estimate that is to examine the budget of the dedicated PR fleet within the Air Force. The deployment costs are likely to be similar between military rescue and PRCRAF, as military rescue helicopters also must be flown to the area of operations in large airlift aircraft. Also, for estimating costs, the CRAF airlines are paid for personnel on a per-person per-mile basis, and for cargo on a per-pound per-mile basis.⁵² Would the PRCRAF be paid per person rescued? That creates an odd scenario where companies could profit from military deficiencies in equipment and training, leading the cynical to warn of entrepreneurs purposely lobbying against military equipment and training to profit from the rescues that would ensue. Lastly, how would sitting alert be reimbursed if that capability is desired? If paid per day on alert, the PRCRAF companies would have less financial incentive to rescue well, but it would remove the potential conflict of interests of being paid per rescue.

These cost factors above would impact both contract and CRAF-type providers, but unlike straight contractors, CRAF carriers' decision to participate in CRAF also has to balance the risks associated with activation, and the potential loss in profit with regular customers activation entails, with the peacetime incentives offered as part of the program. According to Air Mobility Command, no subsidies are provided to CRAF carriers to make up for profit lost due to activation,⁵³ and a PRCRAF would have a lower ability to predict assured business than is possible with standard airlift CRAF. Because it may be harder to incentivize with peacetime governmental work, the government may have to

⁵⁰ For example, the FAA prohibited flights to Iraq.

⁵¹ S Conway, "Scale-free Networks and Commercial Air Carrier Transportation in the United States," in *24th Congress of the International Council of the Aeronautical Sciences*, vol. 29, 2004, 7. Referenced Lois J. Batchelder, Katherine M. Poehlmann, and Jean R. Gebman, *Finding the Right Mix of Military and Civil Airlift, Issues and Implications: Volume 2. Analysis* (Santa Monica, CA, 1994).

⁵² Jerry D. Harris Jr, "Civilian Reserve Air Fleet: Should the USAF Use It Routinely?" (1997), 20.

⁵³ "Headquarters Air Mobility Command: Command Brief," 32.

pay subsidies to incentivize companies to be part of PRCRAF. The subsidies would increase the cost of the program, however, which lowers its appeal in this era of fiscal constraint.

This future of Coast Guard SAR and other civil SAR organizations that receive government funding may also be impacted by budget cuts, and this may affect their desire to receive CRAF subsidies. Eventually the United States may reach a point where the government will not have the money to fund these SAR organizations, and they will have to be funded by revenue or private donations in order to operate. Once a SAR organization is privately-owned, it could be forced to rescue those who cannot pay, like civilian emergency rooms must treat patrons with life-threatening injuries or illnesses regardless of their ability to pay.⁵⁴ This may drive the development of a new industry—rescue insurance—that may become similar to the auto insurance and health insurance industries, where companies get paid a pre-set amount for services regardless of what is charged.⁵⁵ Private or commercial SAR organizations may be the only options available for civil rescue, but only if they can generate the revenue necessary to stay in business—and CRAF subsidies may be a part of that generation.

5. No PR/Self PR

The overwhelming cultural imperative in the United States towards rescuing isolated persons is unlikely to accommodate a complete elimination of the personnel recovery function in the near future. Even though the United States has stood down entire programs before, such as the space shuttle program and the capability for manned space flight, laying down the PR program would likely be a much more emotionally-charged issue because it comes with the cultural guilt of leaving isolated persons to be captured, starved, tortured, or killed. But there are several important intellectual points for the future that must be considered before discounting this option.

⁵⁴ The Emergency Medical Treatment and Active Labor Act (EMTALA) was passed by the US Congress in 1986. It states that in the case of a hospital that has a hospital emergency department, if any individual... comes to the emergency department and a request is made... for examination or treatment for a medical condition, the hospital must provide an appropriate medical screening examination within the capability of the hospital's emergency department, including ancillary services routinely available to the emergency department to determine if an emergency medical condition exists. Furthermore, the law prohibits any participating hospital from delaying such screening examination or further care "in order to inquire about the individual's method of payment or insurance status." Accessed 6 Apr 2014 at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1305897/>

⁵⁵ Idea from <http://www.backpacker.com/blogs/62> Accessed 9 Apr 14.

First, the changing fiscal environment may force the United States to accept a lower level of capability—the United States may have to admit that it cannot allow the ‘leave no man behind’ ethos to continue. In the words of Tim Healy, “there is no *affordable* way to guarantee that we can get everybody.”⁵⁶ This is especially true considering that 43% of the isolated personnel in CENTCOM between October 2001 and June 2009 were non-US civilians—as the US budget dwindles, there may not be extra resources to continue making humanitarian rescues.⁵⁷ While the United States Armed Forces Code of Conduct requires isolated persons to make every effort to evade and escape, equipping and training individual members could be the extent of the personnel recovery system. This is a paradigm shift for the United States, but it is the present reality for every other country on earth that does not maintain such a robust PR capability.

If the United States cut out dedicated rescue, what would happen to the money saved? Some would just be eliminated and contribute to budget reductions. However, it probably will not all translate directly into savings. A portion of the savings could go back into the operational training budget to give the aircrews and other high-risk-of-capture unit members more experience so that they do not end up *needing* rescue. Also, funding for technological countermeasures and unmanned assets would possibly rise as a preventative measure. These measures could save money in the long run because equipment and crews would be less likely to be lost to enemy forces, and the man-hours spent looking for them could be invested back into the prosecution of the war. Also, a portion of the saved money could go into more robust SERE programs for a wider audience. If rescue forces are not coming to extract them, forces need to be equipped with the training on how to get back to friendly control on their own. Lastly, a portion should go to providing existing platforms and crews an appropriate level of expedient rescue capabilities to assist if the opportunity arises.

Second, this option can be made more palatable if technology improves to prevent or aid isolated persons. The USAF PR Core Function Concept asserts that well-prepared isolated persons improve the likelihood that recovery, however it may occur, will be

⁵⁶ Tim Healy, personal email to author, 2013.

⁵⁷ US Joint Forces Command, *Assessment of Combat Search and Rescue Requirements in a Joint Context*, Joint Personnel Recovery Agency, 13 August 2009, 12.

successful.⁵⁸ So what *will* the impact be of technological and biotechnological advances? Will survivors soon “Facetime” their rescue force as survival equipment budgets shrink? Will a dip in rescue capability accelerate the push towards remotely-piloted and autonomous military assets? Will the advent of a remotely-piloted rescue vehicle change the risk tolerance of rescue attempts? Will isolated persons someday be able to carry weeks’ worth of food and water pellets in their pocket, allowing the recovery force more time to reach them? Will the ability to clone human beings affect the cultural imperative towards 100% PR? Will the implantation of microchips into all humans make searching for and communicating with isolated persons a non-issue? And though it sounds like science fiction, what if someday in the future isolated persons will just set up a force field around their position and teleport themselves back to their home base from the battlefield? This would obviously make having a dedicated personnel recovery force quite unnecessary.

Conclusion

I am interested in the future because that is where I plan to spend the rest of my life.

Maj Gen Perry Smith, USAF, Retired

Everyone takes the limits of his own vision for the limits of the world.

Arthur Schopenhauer

This chapter contained analysis that showed the need for options other than the cultural and historical practice of costly rescue missions. Although the cultural imperative in the United States towards rescuing isolated persons is unlikely to accommodate a complete elimination of the personnel recovery function in the near future without some sort of technological innovation to accommodate personnel protection or return, fiscal constraints may force a restructuring of how personnel recovery is accomplished. The five potential PR restructure approaches included: redesignating and redistributing dedicated PR assets to US Special Operations Command (SOCOM); moving all PR to the Guard and Reserve; moving to contract PR, similar to Blackwater-type contracts; moving to privatized PR, similar to the CRAF; and initiating a policy of self-PR where there is no institutionalized PR infrastructure. The future of PR

⁵⁸ United States Air Force *Personnel Recovery Core Function Concept* 2013, 5.

might lay in Option #1, Option #5, or any combination of Options #1-5. The first two options—the SOCOM move and the Guard/Reserve move--seem the most likely, while the fifth option—no PR or a policy of self-PR—seems the least likely in light of the cultural and historical evidence. But if the Air Force decides that it will divest the HH-60 and HC-130 fleets as they age, it may opt for options 3 or 4, the civilian providers, as the next generation of personnel recovery provider.

Ultimately, this research has shown that the US value of life is played out in its desire for PR, but strategically the United States must analyze its plans in light of its resources. With current budgets shrinking, the implementation of any grand plan to increase personnel recovery capabilities at increased cost is unlikely, as is any plan to maintain current capabilities at greater cost. The future of personnel recovery is also constrained by the force structure already in place, as any plan must accommodate the reallocation of equipment and the reemployment of personnel. Even facing these hefty challenges, the American public and its government seem morally opposed to laying down the capability completely. The end result must be a compromise between the cultural imperative and the fiscal reality.

The most important outcome of this work is not necessarily to pick an option and run with it, although that may happen. The most important outcome is for readers to break the chains of ‘what is’ to imagine ‘what could be’--to question the unquestionable. Before an organization can successfully accomplish innovation, it must change its thinking. Organizational theory notes that change occurs as a result of natural reaction to threat, failure, or desire to expand, and this change may result from fear of threat or failure due to fiscal constraints.⁵⁹ Robert Jervis’ concept of cognitive consistency, which states people “see what they expect to see and assimilate incoming information to pre-existing images,” molds people’s thoughts unless they are motivated and taught to think differently.⁶⁰ By altering preconceived notions about the future of PR, the DoD can affect what people expect—or, more interestingly, what they do not expect. If the

⁵⁹ Barry R. Posen, *The Sources of Military Doctrine* (Ithaca, NY: Cornell University Press, 1984), 59.

⁶⁰ Robert Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 1976), 117.

strategic narrative can mold people to expect that the future will not have to look the same as today, their very belief will help to make it so.



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